

THE ARCHITECTS' JOURNAL

STACK



standard contents

every issue does not necessarily contain all these contents, but they are the regular features which continually recur.

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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to I one week, I to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: W. Marlborough Whitehead, "Dyneley," Castle Hill, Avenue, Berkhamstead, Herts.	
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Welbeck 5721
ABT	Association of Building Technicians. 5, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain. 4, St. James' Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
APRR	Association for Planning and Regional Reconstruction. 34, Gordon Square, W.C.1.	Euston 2158-9
ArchSA	Architectural Students' Association. School of Architecture, Manchester Municipal School of Art, All Saints, Manchester, 15.	Ardwick 3480
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Welbeck 9738
ASB	Architectural Science Board of the Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721
AScW	Association of Scientific Workers. 15, Half Moon Street, Piccadilly, W.1.	Grosvenor 4761
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Welbeck 5721
BATC	Building Apprenticeship and Training Council. Lambeth Bridge House, S.E.1.	Reliance 7611, Ext. 1706
BC	Building Centre. 9, Conduit Street, W.1.	Mayfair 8641/6
BCC	British Colour Council. 13, Portman Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13.	Perivale 6869
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. 43, George Street, Croydon.	Croydon 5452
BEDA	British Electrical Development Association. 2, Savoy Hill, W.C.2.	Temple Bar 9434
BGF	British Gas Federation. 1, Grosvenor Place, S.W.1.	Sloane 8266
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Millbank, S.W.1.	Whitehall 5140
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 2246
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333
BTE	Building Trades Exhibition. 4, Vernon Place, W.C.1.	Holborn 8146/7
CABAS	City and Borough Architects Society. C/o Johnson Blackett, F.R.I.B.A., Borough Architect, Town Hall, Newport, Mon.	Newport 3111
CAS	County Architects Society. C/o A. Guy Chant, F.R.I.B.A., Salop County Council, 5, Belmont, Shrewsbury.	Shrewsbury 3031
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CDA	Copper Development Association. Kendals Hall, Radlett, Herts.	Radlett 5616
CIAD	Central Institute of Art and Design. 41, 42, Dover Street, W.1.	Regent 3074
CIAM	Congrès Internationaux d'Architecture Moderne. Dolderhof, 7, Zurich, Switzerland.	
CID	Council of Industrial Design. Tilbury House, Petty France, S.W.1.	Whitehall 6322
CPC	Codes of Practice Committee. MOW, 42, Onslow Gardens, S.W.7.	Kensington 8161
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W. Sloane 4280	
CUJC	Coal Utilization Joint Council. 13, Grosvenor Gardens, London, S.W.1.	Victoria 1534
DGW	Directorate General of Works, Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 1761
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
DOT	Department of Overseas Trade. 35, Old Queen Street, S.W.1.	Victoria 9040
EC	Electricity Commission. Savoy Court, Strand, W.C.2.	Temple Bar 7565
EJMA	English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
FB 1951	Festival of Britain 1951. 2, Savoy Court, Strand, W.C.2.	Waterloo 1951
FASSC	Federation of Association of Specialists and Sub Contractors. 21, Tothill Street, S.W.1.	Whitehall 9606
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	The Flush Door Manufacturers Association Ltd. Trowell, Nottingham. Ilkeston 623	
FLD	Friends of the Lake District. Pennington House, Nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders. 26, Great Ormond Street, Holborn, W.C.1.	Chancery 7583
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4041
FS (Eng.)	Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
GG	Georgian Group. 27, Grosvenor Place, S.W.1.	Sloane 2844
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 5615
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Whitehall 4577


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[Vol. 110

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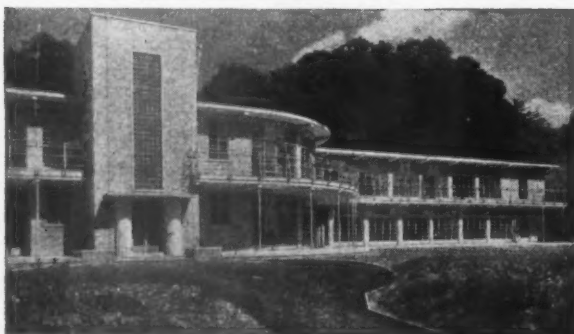
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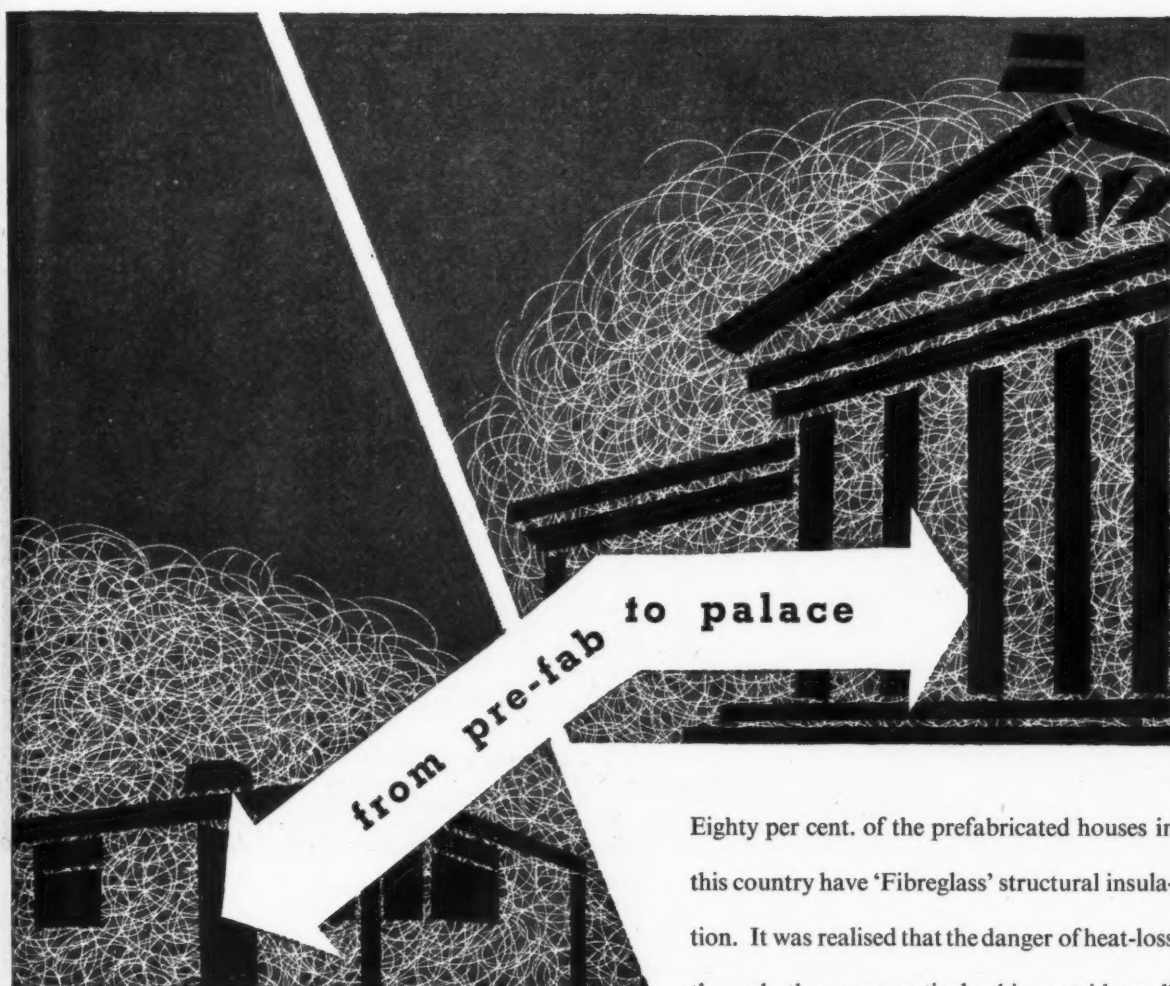


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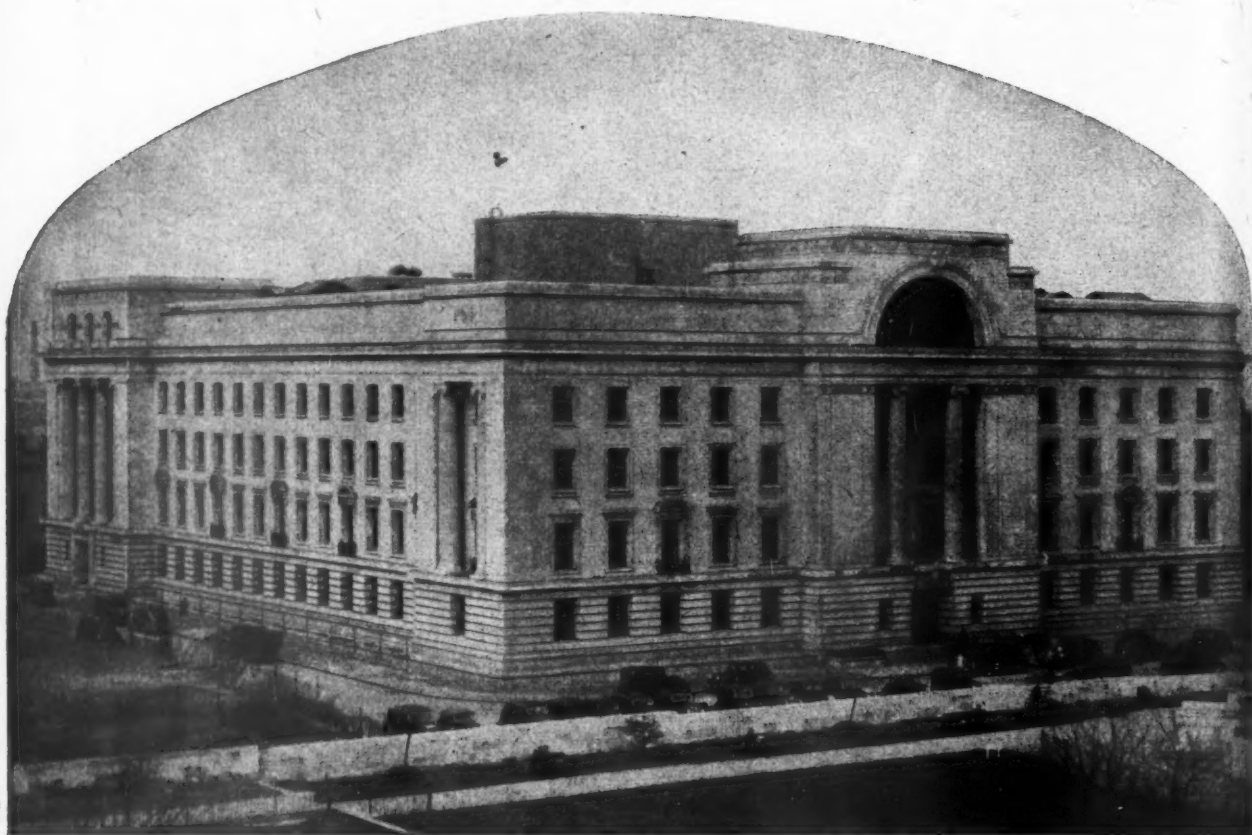
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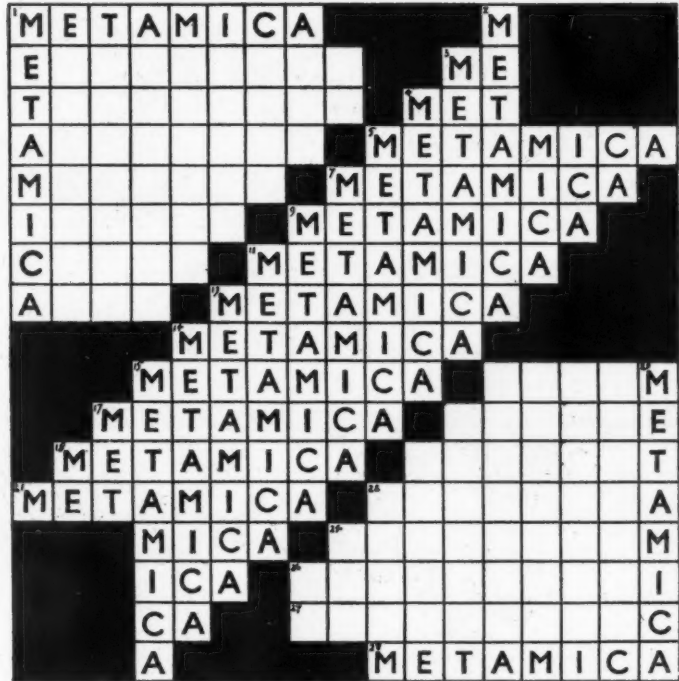
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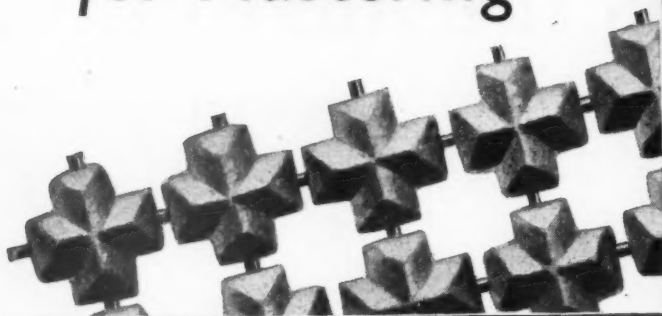
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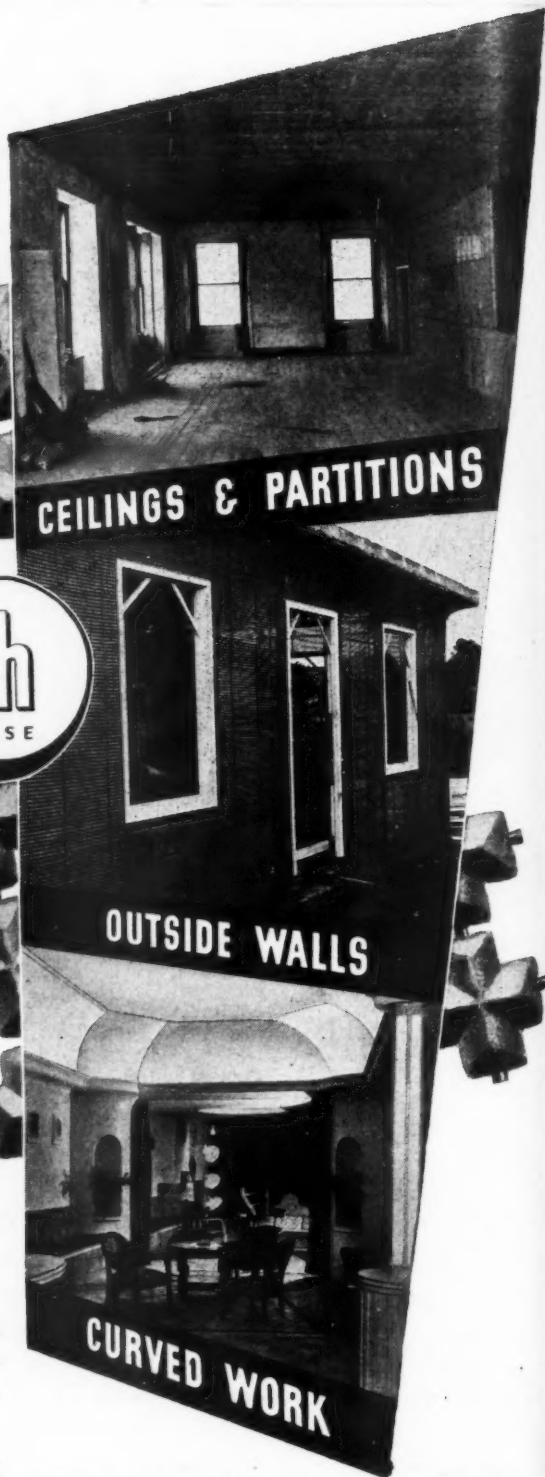
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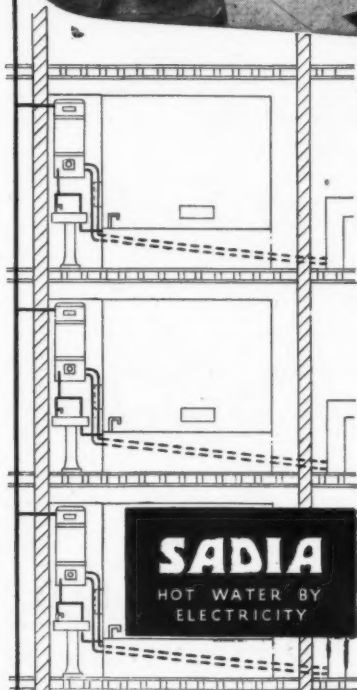
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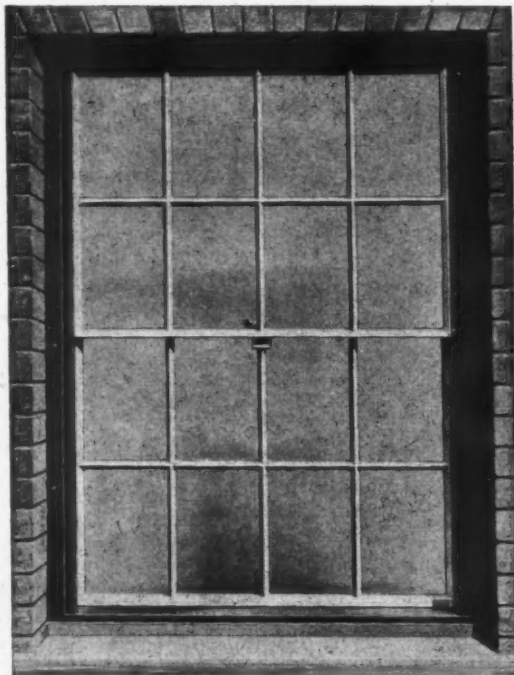
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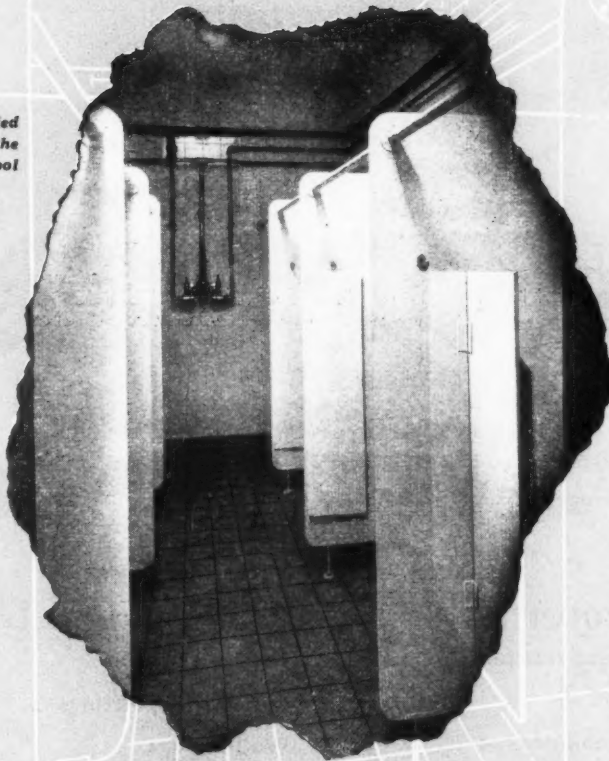
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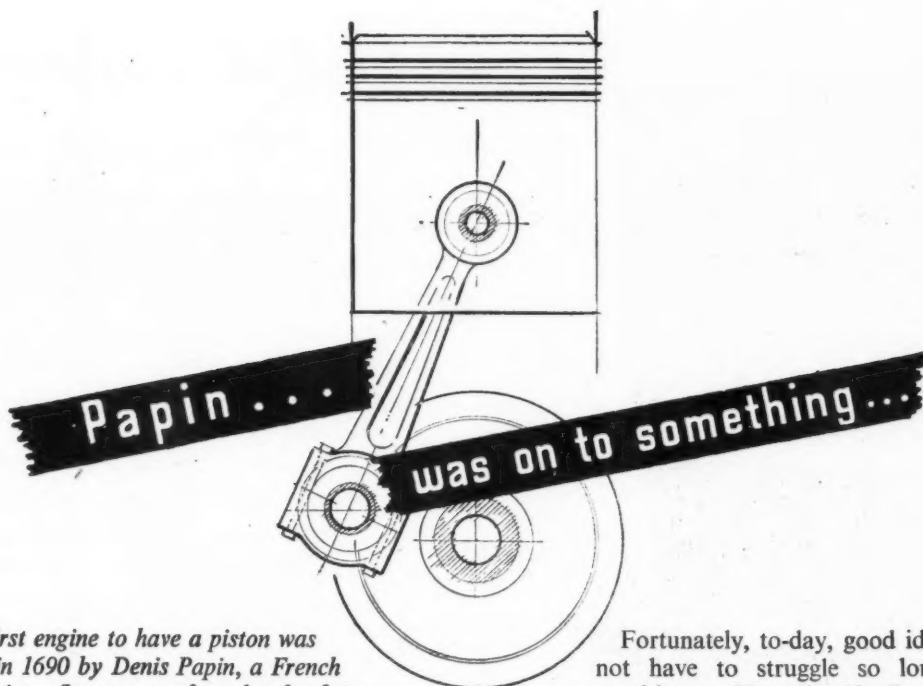
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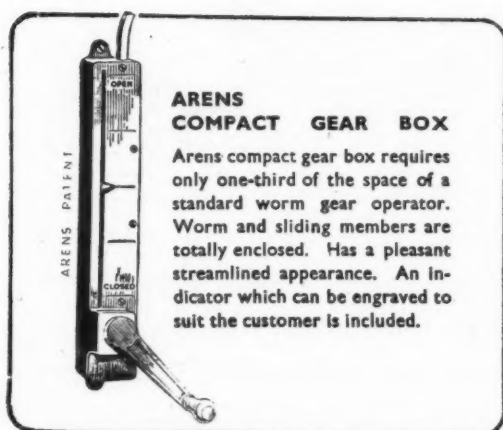
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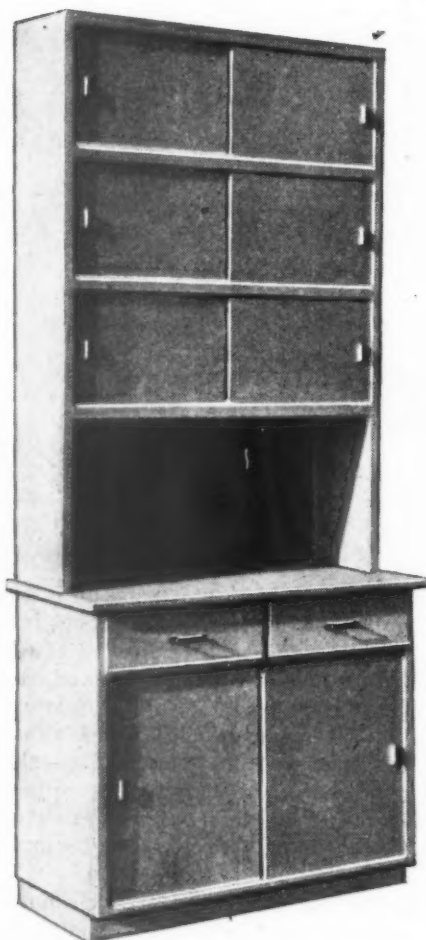
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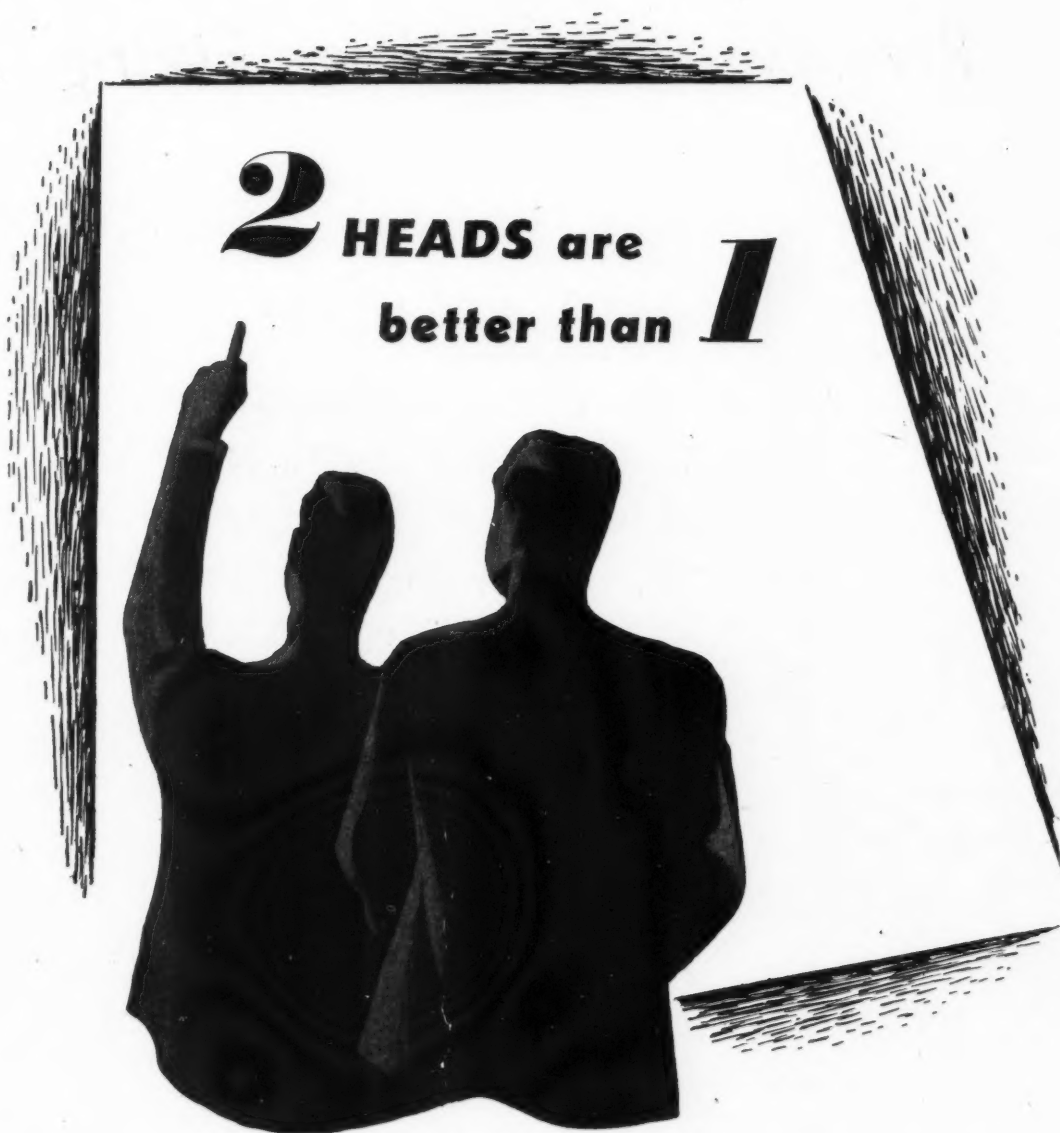


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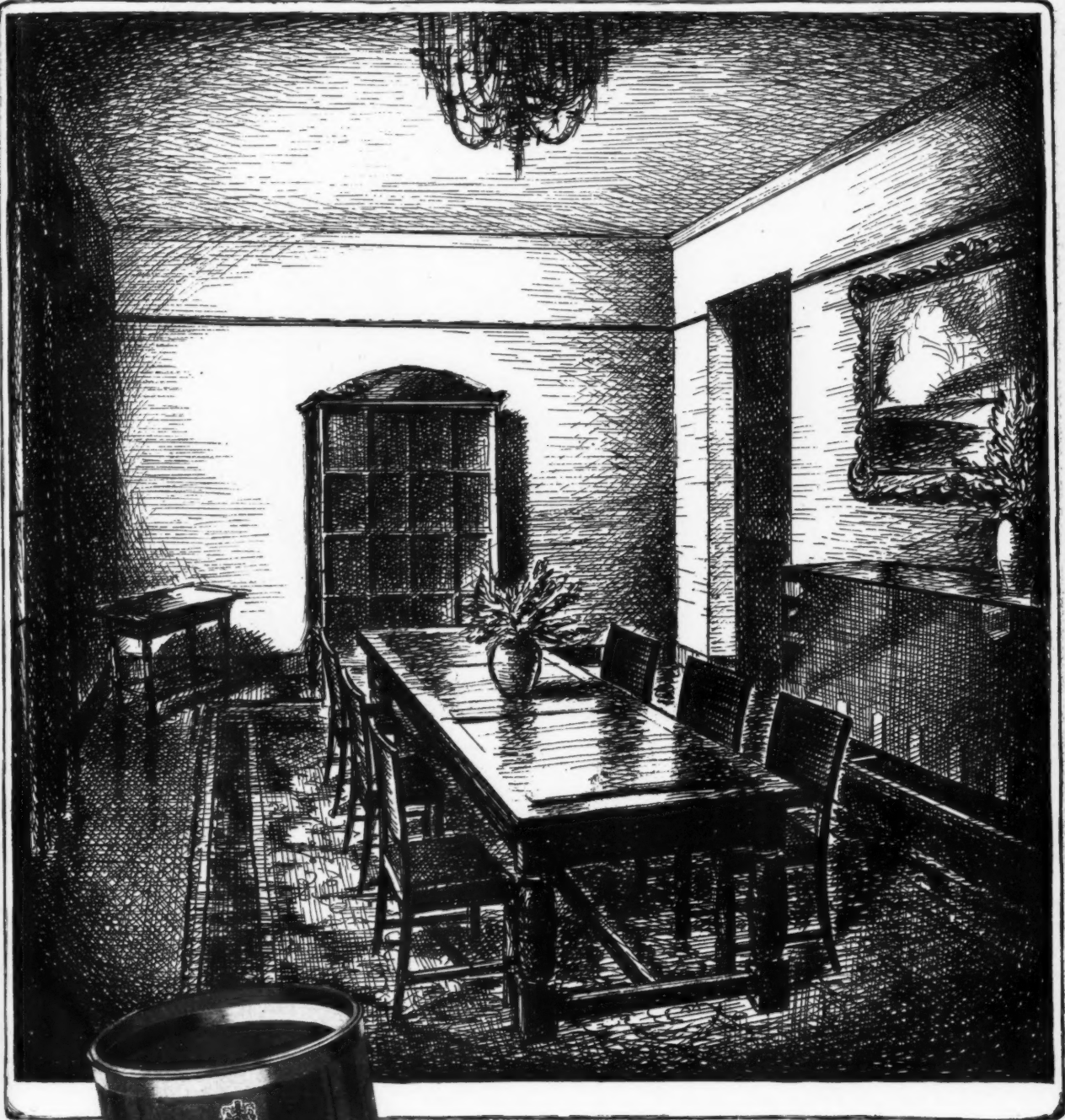
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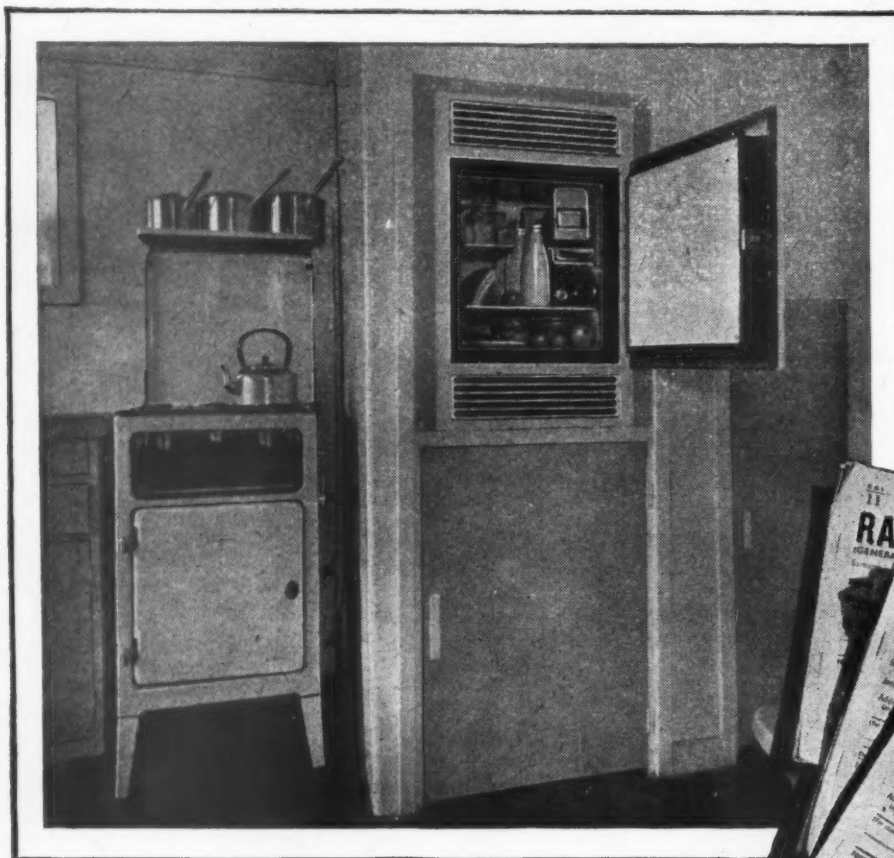
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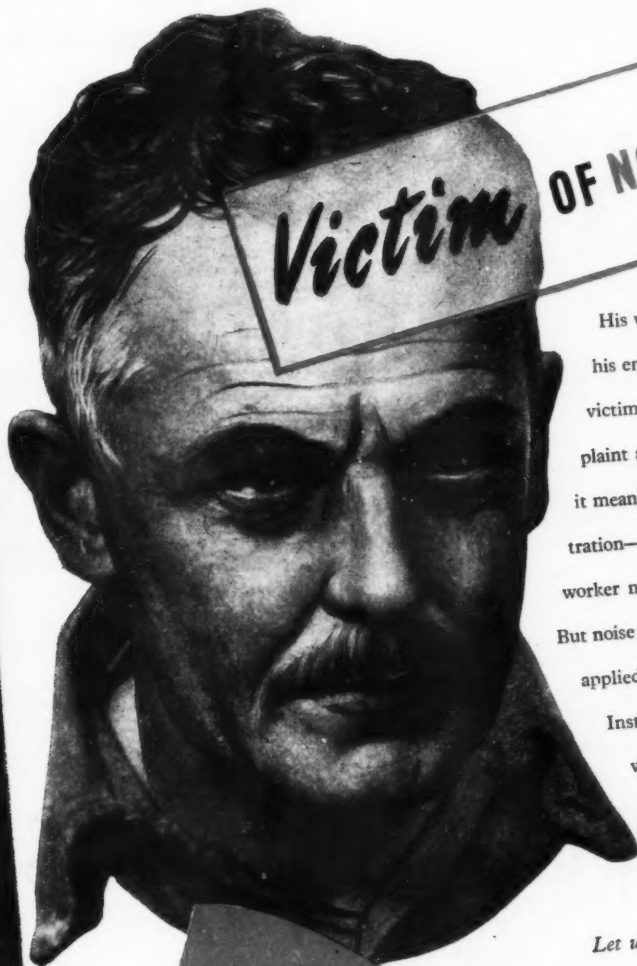
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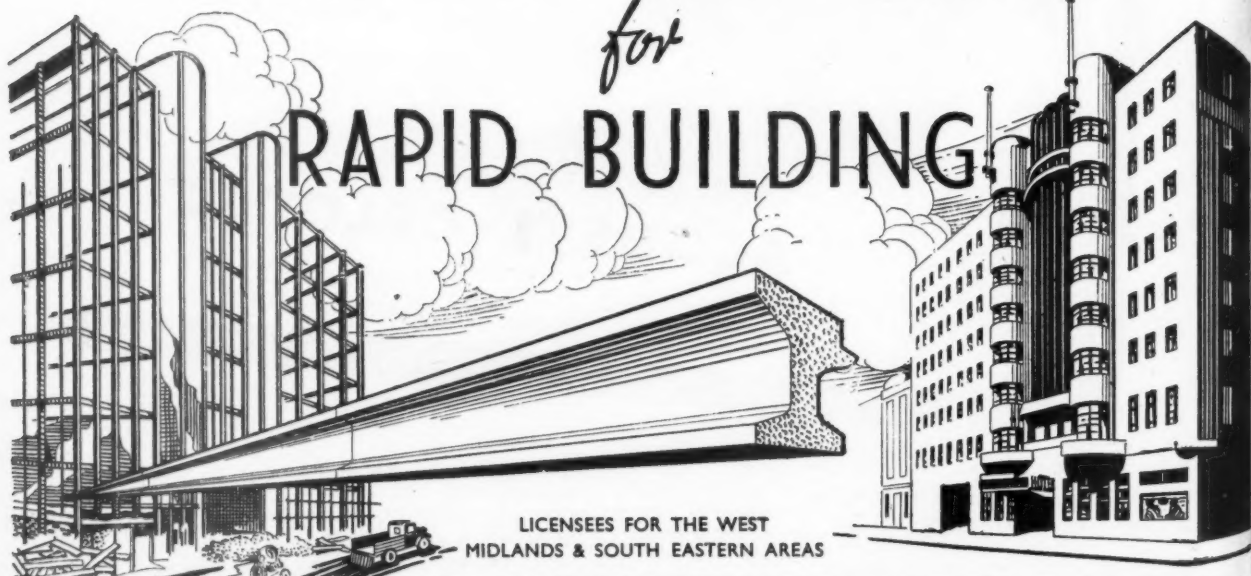
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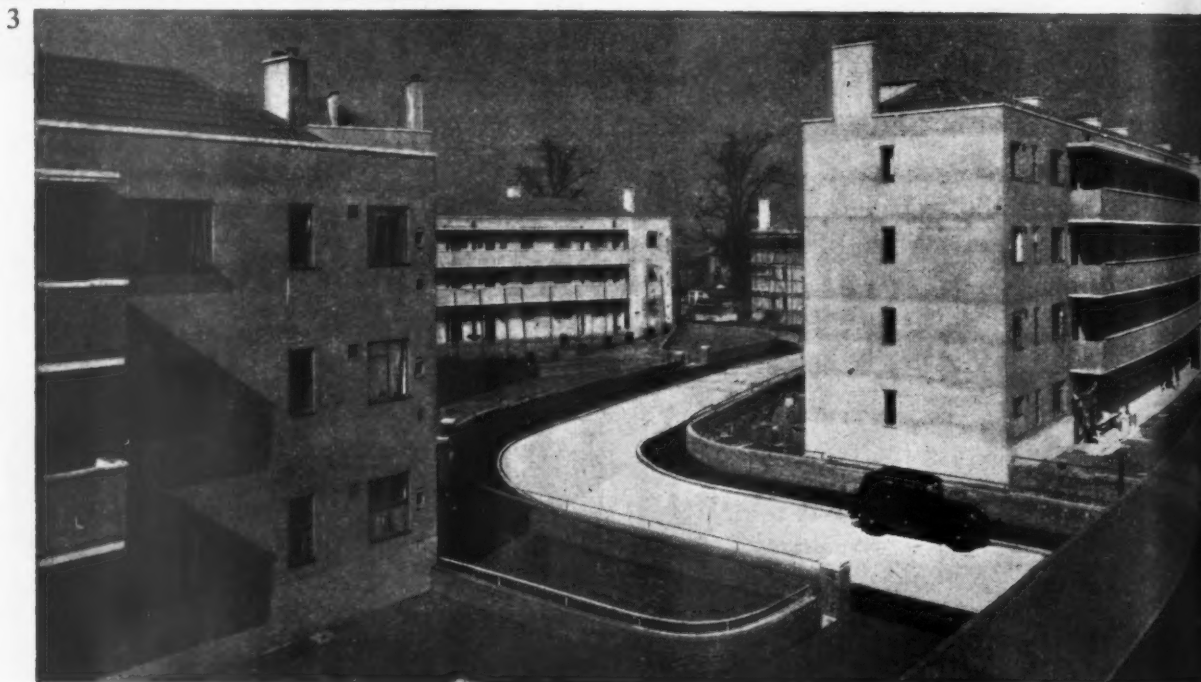
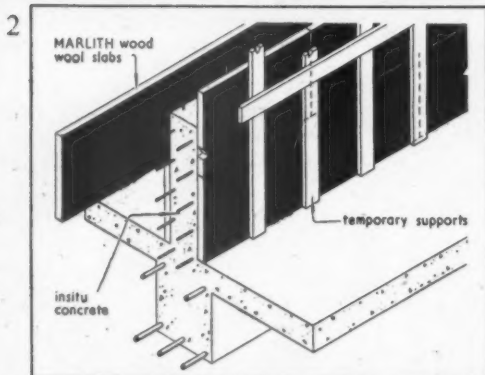
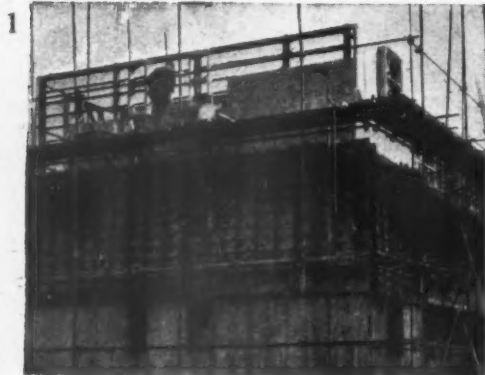
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Marlith WOOD WOOL BUILDING SLABS

- 1 Work in progress on one of the block of flats at the L.C.C. Flower House Estate, Catford.
- 2 Method of using Marlith as permanent shuttering for walls.
- 3 A view of the completed flats at the Flower House Estate.

THE MARLEY TILE COMPANY LIMITED
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L.C.C. FLOWER HOUSE ESTATE

Marlith Wood Wool Building Slabs used as permanent insulating shuttering

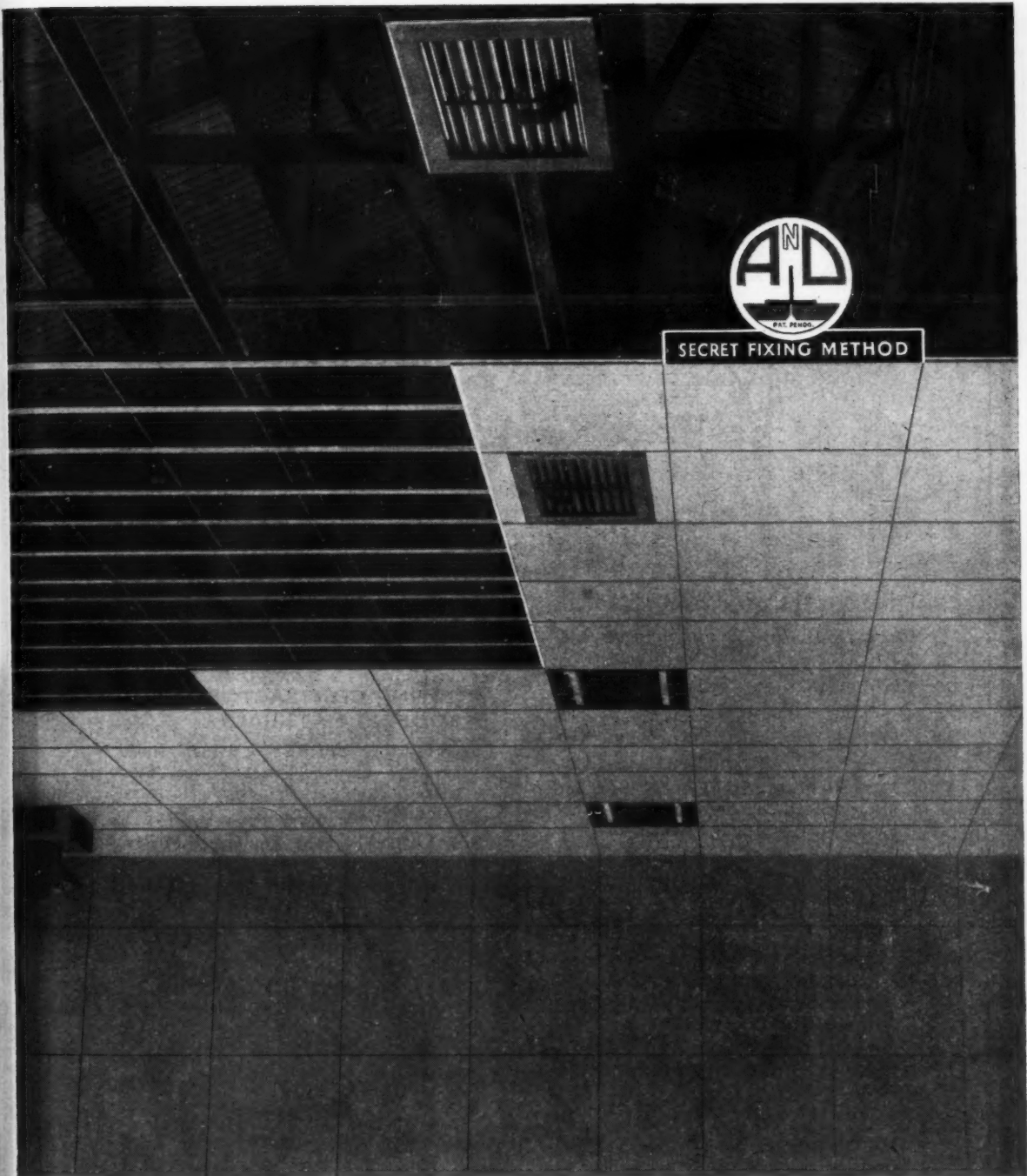
1-inch MARLITH is used as permanent shuttering on the inside of the external walls of the flats at this L.C.C. Estate. In all there are 15 blocks of 3 and 4-storey flats and 53,000 sq. yds. of Wood Wool Slabs have been used.

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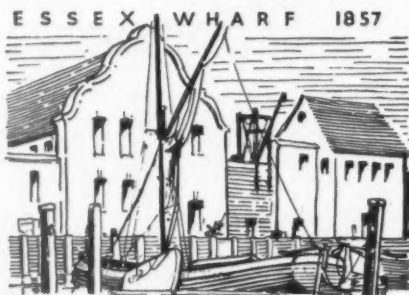
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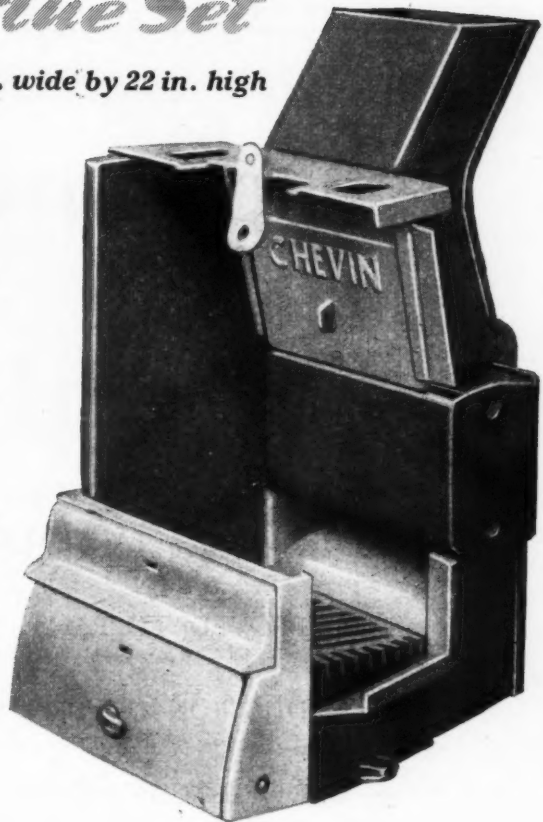
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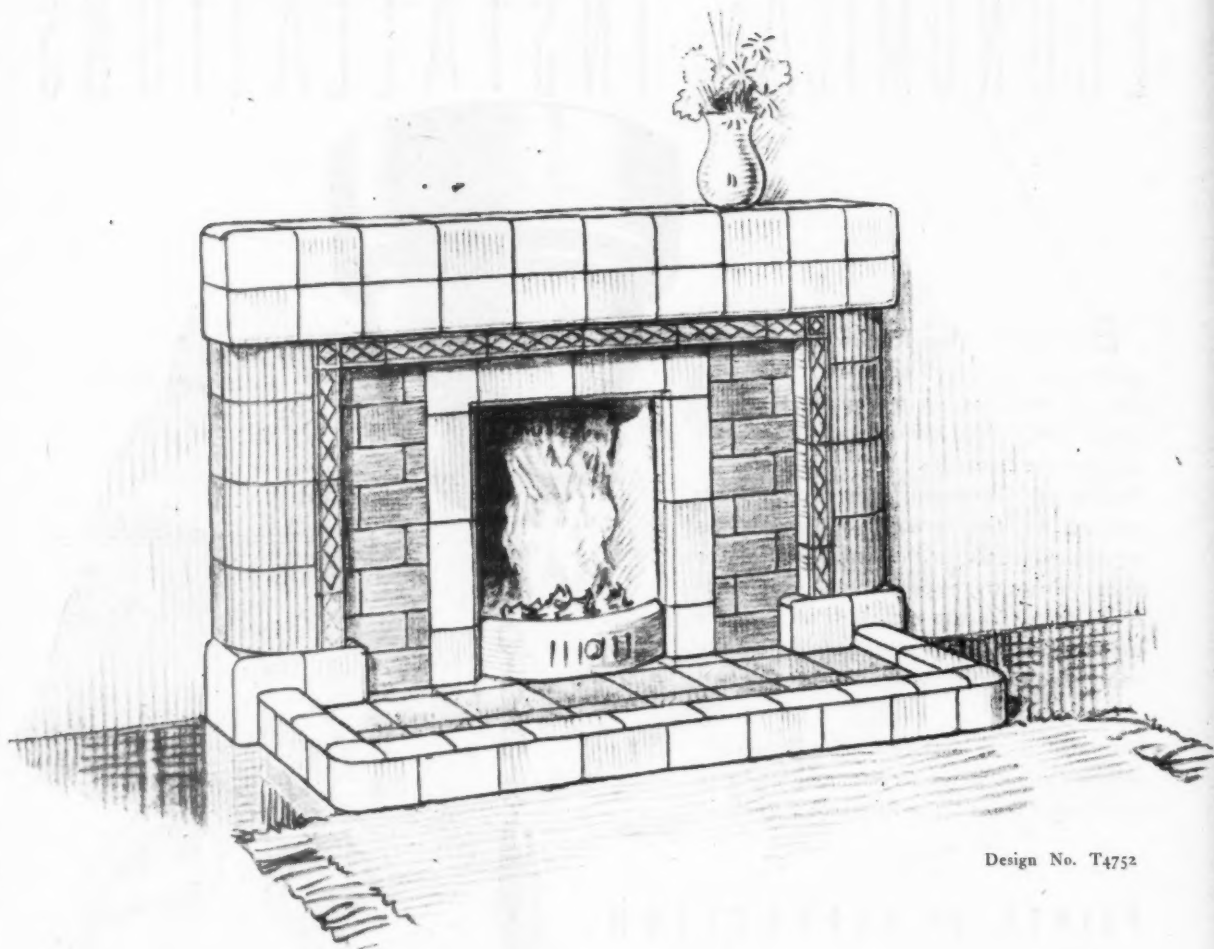
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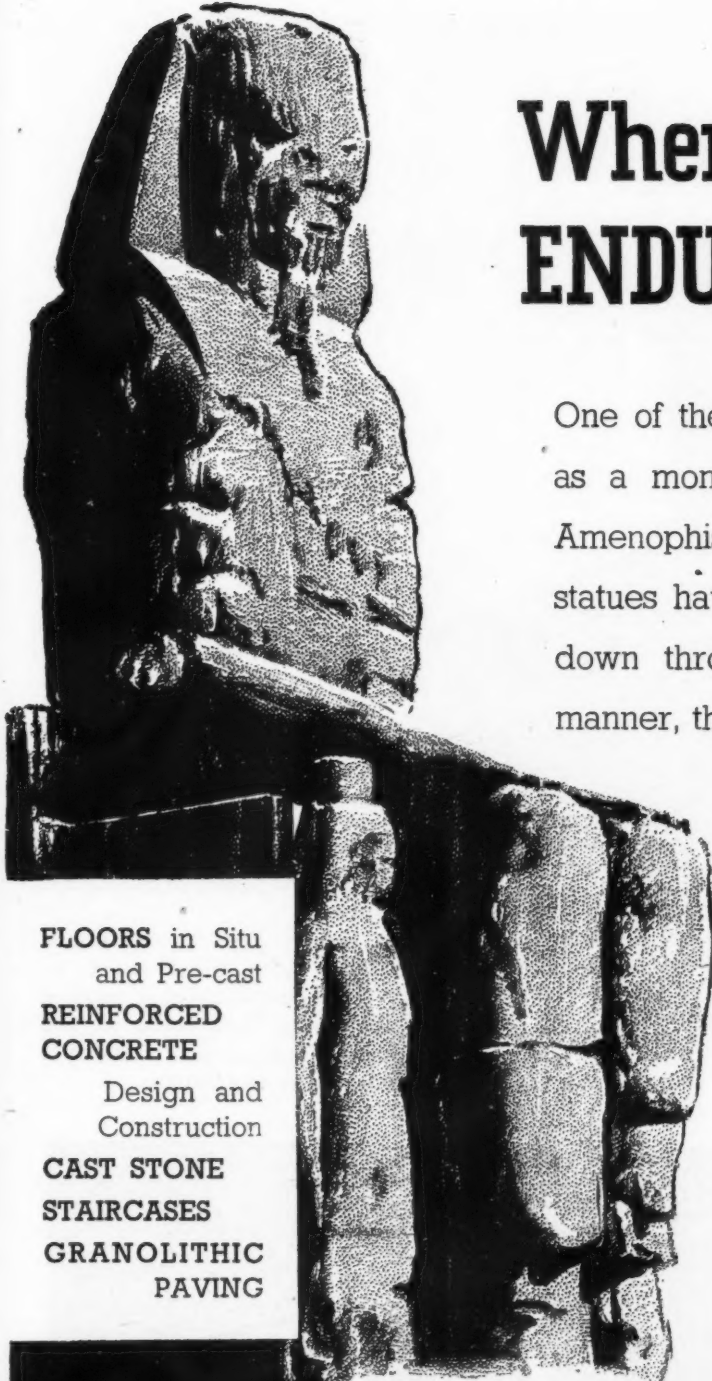
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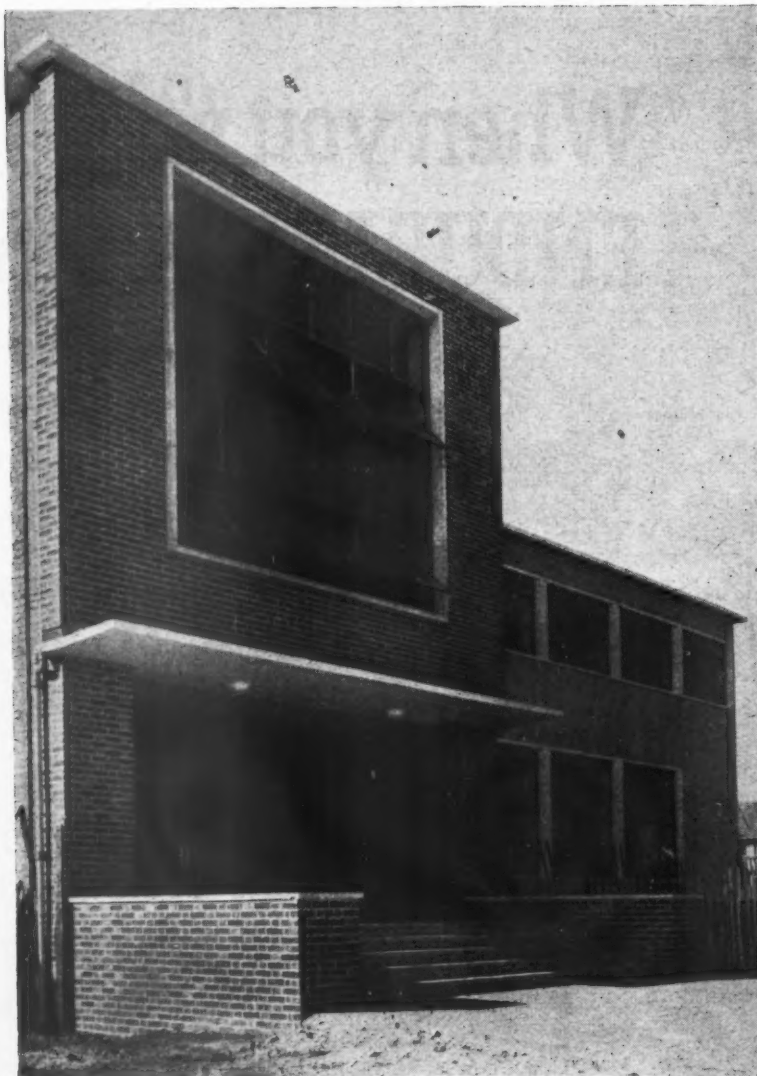
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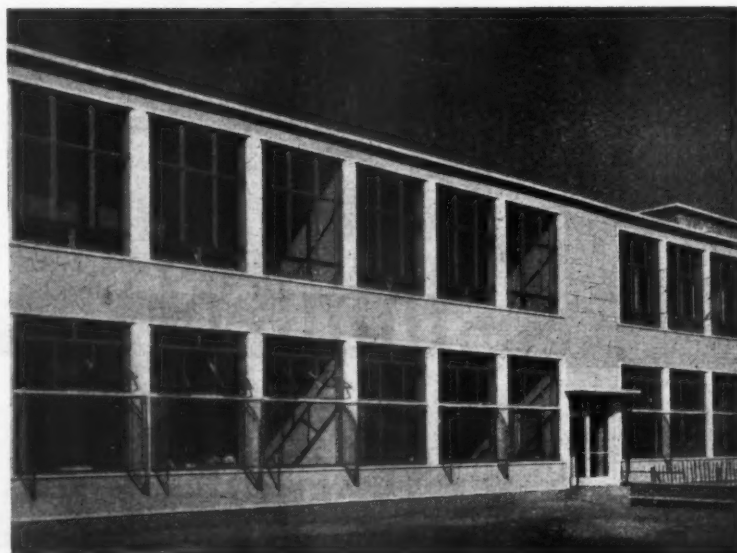


*Hoine Park Primary School
Architect: R. H. Matthew, R.I.B.A.
General Contractors: Thomas Tierney & Co. Ltd*

Amongst other recent examples of the use of Silexine Stone Paint for exterior protection and decoration is Athenaeum Court. In this building two other Silexine products have been used—Silexine Super Gloss Paint for the window surrounds and, perhaps of even greater interest to architects, the internal walls are all treated in different colours with the new low-maintenance-cost Silexine Plastic Emulsion Coating (Stella 1205).

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**BUILDING EXHIBITION - OLYMPIA
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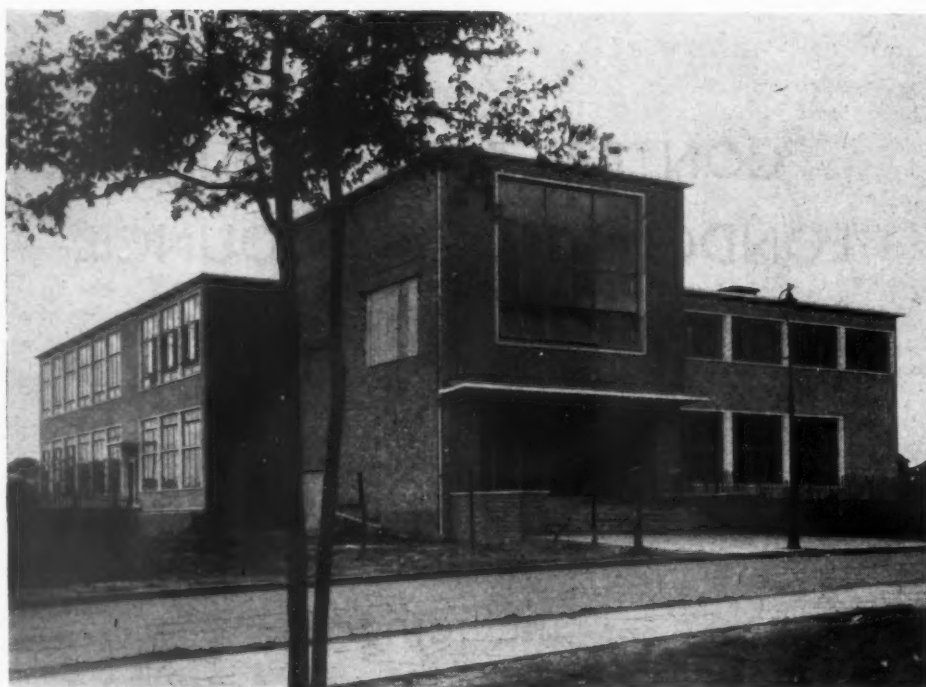
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Described and illustrated in this issue.



ARCHITECT : ROBERT H. MATTHEW, A.R.I.B.A.

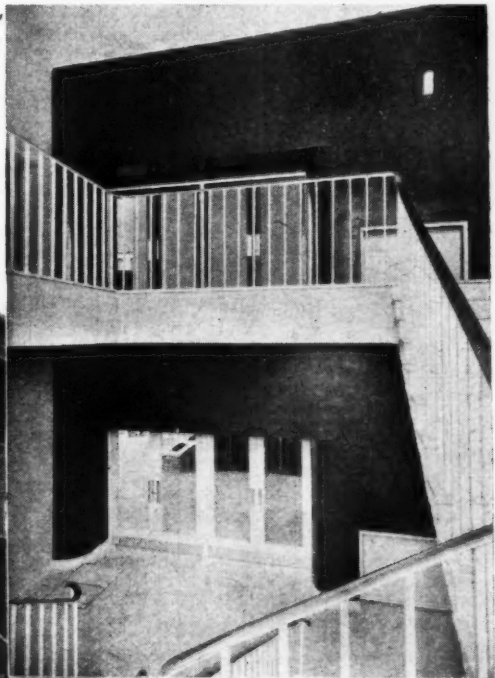
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The Main Entrance showing the use of brick

In the building of Horn Park School the 'Orlit' principle was used

Architect: Mr. Robert H. Matthew, A.R.I.B.A.,
Architect to the L.C.C.



A view showing the interior

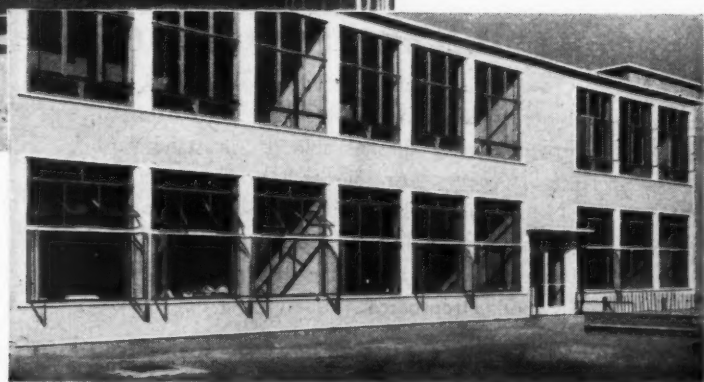
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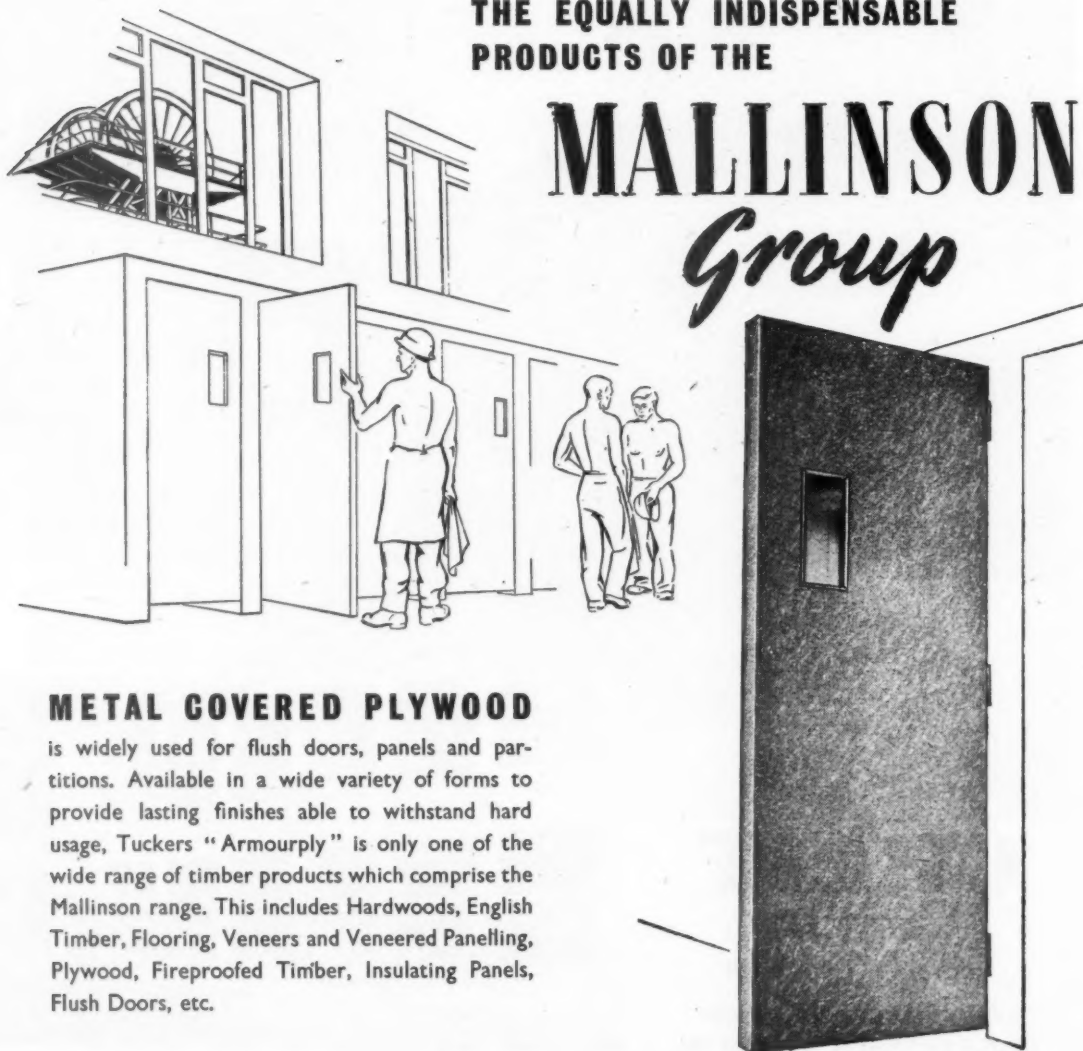
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DIARY FOR OCTOBER NOVEMBER AND DECEMBER

Titles of exhibitions, lectures and papers are printed in italics. In the case of papers and lectures the authors' names come first. Sponsors are represented by the initials given in the glossary of abbreviations on the front cover.

BRISTOL. *Exhibition of Prestressed Concrete.* Electricity House, Colston Avenue, City Centre. (Sponsor, MOW). 10 a.m.-5 p.m. (including Saturdays).

UNTIL NOV. 1

LONDON. *Exhibition of Houses in the USA.* Building Centre, 9, Conduit Street, W.1. Mondays to Fridays, 10 a.m. to 5 p.m.; Saturdays, 10 a.m. to 1 p.m.

OCT. 31

Business Efficiency Exhibition. Olympia. (Sponsors, Office Appliance Trades Association). 10 a.m. to 8 p.m. daily.

Nov. 9-19

R. Fitzmaurice. Changes in Building Technique. RIBA, 66, Portland Place, W.1. (Sponsor, MOW). 6.30 p.m.

Nov. 14

Building Exhibition. Olympia. Daily, 10 a.m. to 8 p.m.

NOV. 17-DEC. 1

COMPETITIONS

New Civic Hall at Guildford. Promoters: Guildford Corporation. Assessor: G. A. Jellicoe, F.R.I.B.A. Premiums: (1) £1,000. (2) £500. (3) £250. Site: Firs Estate, London Road, Guildford. The promoters require a design for (a) a large assembly hall, to seat 1,200 persons, to be used for civic and concert purposes, and (b) a small hall, to seat 500 persons, for lectures with an alternative use as a banqueting hall. The halls are to be designed for use separately or together for one function, with ancillary accommodation which includes refreshment rooms and kitchen; lounges; cloakrooms and lavatories; dressing rooms; offices for officials and the caretaker's flat. Drawings, which must be mounted on stiff board, are to be drawn to the scale of 16 feet to one inch. Enquiries must be received by the Town Clerk, Municipal Offices, Guildford, Surrey, with a deposit of £2 2s., to be paid by the competitor for conditions of entry. The last day for questions is November 15, 1949. Designs must be received by April 30, 1950.

(a) *Hall of Residence and (b) Site Layout at Nottingham University.* Promoters: the Council of the University of Nottingham. Assessor: Sir Percy Thomas. Premiums: (1) £1,000; (2) £750; (3) £500. Section (a) is a design for a hall of residence for 150 women students. The promoters will proceed with the scheme as set out by the winning competitor. Section (b) is a layout of the whole site for four halls of residence.

The promoters reserve the right to adopt or modify this scheme, or not to proceed with it. Enquiries must be received by the Registrar, the University, Nottingham, by November 1, 1949. A deposit of £2 2s. must be paid by the competitor for conditions of entry. Designs must be received by March 11, 1950.

Competition for designs for interior treatment of two saloon bars and two public bars. (Sponsor, The Architectural Press Ltd.) Prizes: (1) £500; (2) £250; (3) £100. Assessors: Hugh Casson; J. S. Eagles; R. Furneaux Jordan; E. B. Musman; and J. M. Richards (representing the editors of *The Architectural Review*). Questions must be addressed to "Pub Competition Questions," The Architectural Press Ltd., 9-13, Queen Anne's Gate, S.W.1, and must be received by November 15. Designs must be received by mid-day, February 28, 1950.

Design of Community Centre. The Incorporated Association of Architects and Surveyors. Two prizes, £150 and £75, for Urban Design. Two prizes, £100 and £50, for Rural Design. Open to all architect members of the IAAS, and to any architect, whether principal or assistant, in the United Kingdom, Northern Ireland and Eire. Closing date, February 1, 1950. Applications to General Secretary, 75, Eaton Place, Belgrave Square, S.W.1.

N E W S

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Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis.

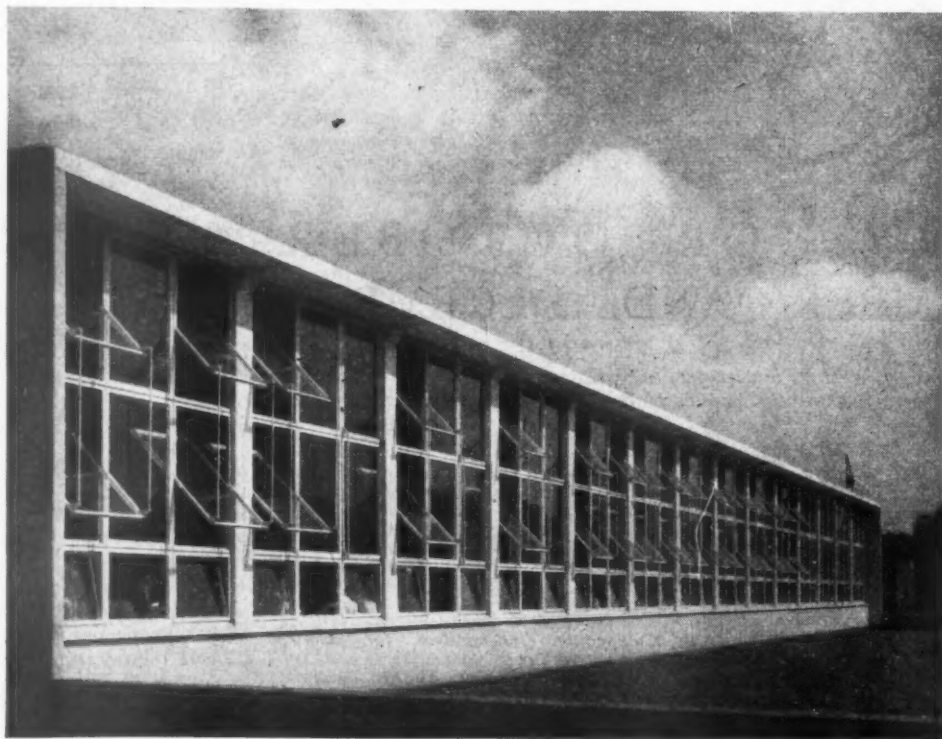
★ means spare a second for this, it will probably be worth it.

★★ means important news, for reasons which may or may not be obvious.

Any feature marked with more than two stars is very big building news indeed.



A ceremony was held at the Sunbury-on-Thames housing estate last Thursday to mark the completion of fifty-eight houses on the site. Dwellings on this estate, some of which are seen above, have aluminium roofs and balcony railings. They will be illustrated and described next week. The architects are Basil Spence and Partners.



L.C.C. SCHOOL at REDRIFF, ROTHERHITHE

R. H. Matthew, A.R.I.B.A., Architect to L.C.C., and R. Wilson, F.R.I.B.A., Architect to Schools Division

CONTINUOUS FACADE
OF HOT-DIP GALVANIZED
WINDOWS WITH PRESSED
STEEL MULLIONS, SURROUNDS
CILLS & INTERNAL TRIM BY

HOPE'S

HENRY HOPE & SONS LTD., BIRMINGHAM & 17 BERNERS STREET, LONDON, W.1

From AN ARCHITECT'S Commonplace Book

GEORGIAN TRADITION IN THE CARIBBEAN. [From *Treasure in the Caribbean*, by A. W. Acworth (Pleiades Books Ltd.). 12s. 6d.] The year 1840 was the apogee of development. Though still looking for inspiration from England, the Islands had each of them developed building habits of their own and had, indeed, gone far towards establishing an architectural tradition. Shingles and fish-scale tiles, timber and brick, cut-stone and Spanish-walling, windows and shutters, hoods and solid shutters, gave ample scope for variety in architectural treatment; and each island had by this time made its choice. The choice was not altogether a free one—it was conditioned by the availability and relative cheapness of materials as well as by the circumstance of geography. But there was still plenty of room for the play of fancy; and, by and large, the colonists made good use of their opportunity. . . . The result is a series of buildings attractive to the eye, well-adapted to their purpose and in complete harmony with their tropical setting: a fitting background, indeed, to the gay throng of top-hatted planters and of coloured folk who six years before had become free subjects of His Majesty King William IV. But 1840 was the apogee. Emancipation in 1834 and Free Trade in 1846 spelt the economic ruin of the British West Indies. At the same time in England the Georgian tradition was itself going into eclipse. In the years following there was little money for new building and such structures as were erected showed the prevailing lack of architectural standards. But this was not all. Estates, and with them estate houses, were abandoned and fell into decay; fire, earthquake and hurricane took their toll of the rest; so that of the buildings which graced the islands in 1840 only a small proportion remain today. Those, however, who are interested in the story of architectural development and in the overseas progeny of our own Georgian tradition, can still find *Treasure in the Caribbean*.

★ The RIBA REGULATIONS for MEMBERSHIP QUALIFICATIONS have been revised.

These revised regulations and syllabus for the RIBA Testimonies of Study (Intermediate and Final Examinations) and for the Intermediate, Final and Special Final Examinations, will come into operation on January 1, 1951. The RIBA Final and Special Final Examinations, and the examinations of the Schools of Architecture recognized for the Associateship of the RIBA and for registration under the Architects Registration Acts, 1931-38, will be modified to the extent that the Examination in Professional Practice will be held separately. This will allow candidates to comply with the requirement that twelve months' practical experience must be gained after passing an examination recognized for the Associateship or for registration before the Associateship or registration can actu-

ally be attained. The following exceptions will be made:—

Candidates passing the RIBA Final and Special Final Examinations will be allowed to take the Professional Practice Examination at the first opportunity after passing those examinations provided that they submit satisfactory evidence of having spent, before passing the RIBA Final or Special Final Examination, a minimum period of six years in an architectural office or department or in a suitable technical capacity on building work in course of construction.

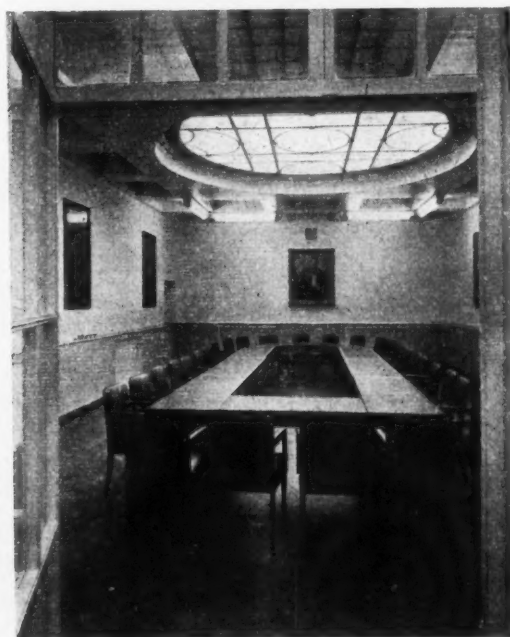
Candidates at recognized schools of architecture qualifying for the Associateship or for registration by the successful completion of a part-time or evening course exempting from the RIBA Intermediate Examination, followed as a minimum by the last two years of a Degree or Diploma Course, will be allowed to take the Professional Practice Examination at the first opportunity after qualifying.

Copies of the revised syllabus and regulations for the RIBA examinations may be obtained from the secretary, RIBA, 66, Portland Place, W.1, on application after November 28, 1949.

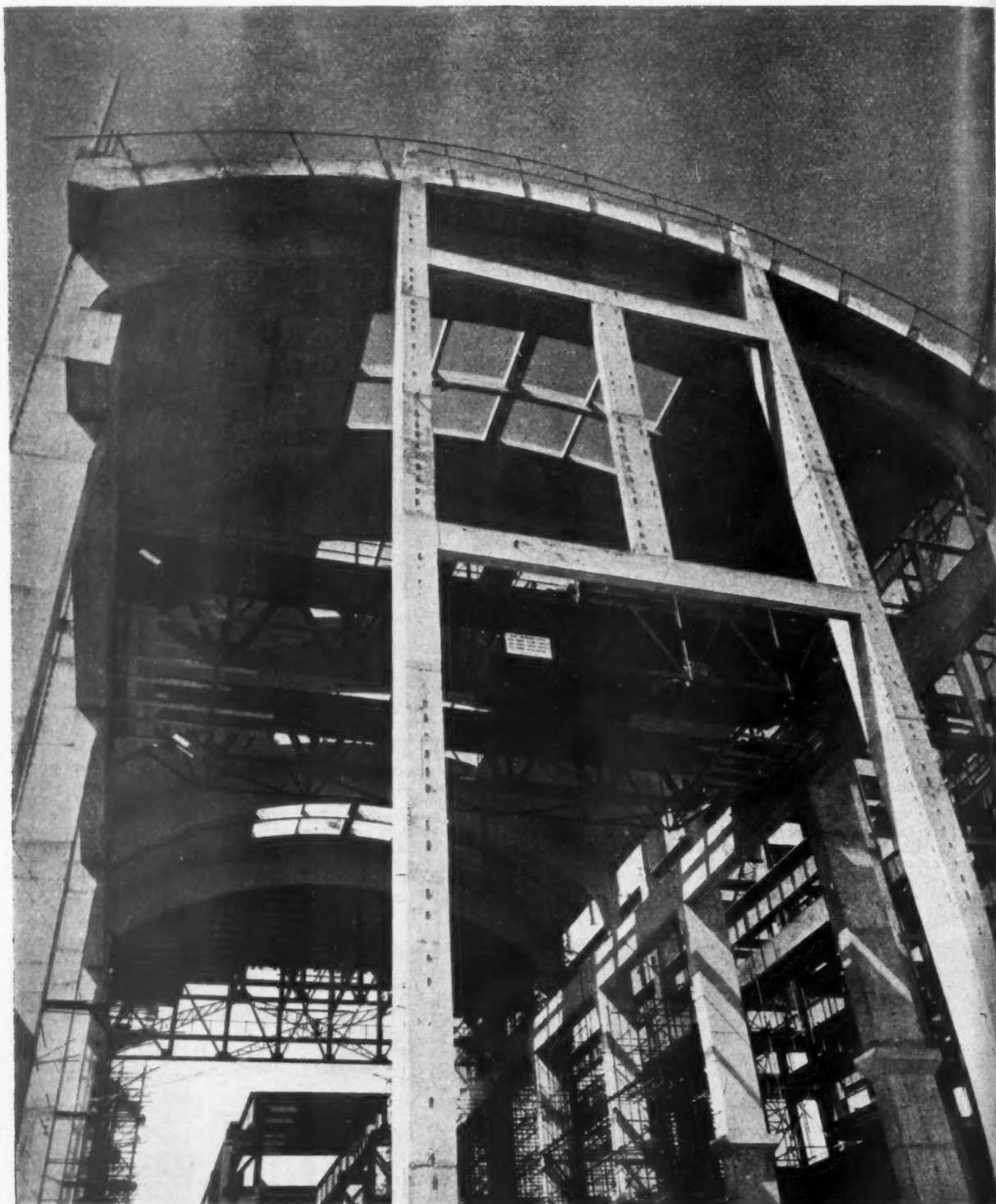
★★★

A NEW HOUSING CUT.

The £35 million cut in the housing programme, announced by Mr. Attlee on Monday, will entail a reduction of 20,000 houses in the total programme of 180,000. The cut will have greatest effect on the private builder, for the proportion of private houses to local authority work will be smaller in future. One result will be a further hardening of prices. Another is likely to be unemployment in the building industry. As the NFBTE has pointed out, the decision is not sound economically, for the cut is being applied to houses which do not cost the rates and taxes a penny.



Above, library, and right, conference room in the extended premises of the British Federation of Master Printers, 11, Bedford Row, W.C. The architect for the building, constructed on a bombed site, was J. D. Wood.



A Reinforced Concrete Turbine House

This building is now being constructed at Skelton Grange Power Station, Leeds. The section shown above, which is only the first half of the complete turbine house, is over four hundred feet in length and is divided into fourteen bays, each thirty-one feet long by seventy-nine feet wide. An unusual feature of the design is the shallow depth of the cross ribs of the portal frames at the spring-

ings compared with the depth at the centre of the frame. The architect for the whole project is R. A. H. Livett. The erection of the turbine house is being carried out by Holst and Co. Ltd. to their own designs, which were made in collaboration with Chisarc and Shell "D" Ltd. for whom H. G. Cousins acted as consulting engineer. Further photographs will appear next week.

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★ *The ABT has submitted evidence to the SCHUSTER Committee set up by the MOTCP.*

The Schuster Committee was set up to take account of the present and prospective scope of town and country planning and to consider and report what qualifications are necessary or desirable for persons engaged in it.

The ABT's evidence was drawn up by a wide range of practising planning technicians, including architects, engineers, surveyors, economists, geographers, sociologists and other social scientists. The Association maintains, in its evidence, that the future shape of town and country planning will depend broadly not upon the physical planner's activities, but upon Government policy, the nation's energies and international affairs. The limits of physical planning have not yet been clearly defined, they say; in spite of recent legislation there is still an absence of economic planning powers at the highest levels and consequently there is no clear co-ordination of physical planning activities. Planners are attempting to solve problems of economic policy and this has so increased the scope of planning and broadened the field of knowledge to be covered that the question which has naturally arisen is whether the present training of planners is wide enough.

The ABT bases its opinions on an analysis of the talks which confront planners of town and country today. It expresses the view that in relation to this analysis the personnel required to carry out such a variety of tasks cannot be standardized; each task requires its own selected team and the quality of work will be of a higher order if the team can draw on planning technicians who have a basic specialized training. The one-man consultant must, of necessity, know something about most things, but with the basic planning organization as it is today, with fairly large planning offices at national, regional, county and local levels, there is the possibility of, and necessity for, team work.

The Association concludes that the bulk of planning personnel should be architects, civil engineers and surveyors with a post-graduate training in planning, working mainly at county and local levels. It also makes the following recommendation:—A number of physical planners with a basic training in economics, geography (or a combination of these) or social science, are required for the national, regional and, to some extent, the county level. Their numbers will not be great and they will deal mainly with the basic problems affecting large areas. Other experts, not planners themselves (such as geologists, agronomists, etc.) are required to contribute to and know about planning. The qualified personnel, of whatever type, require the support of draughtsmen, field workers and others, some of whom are capable and should have the opportunity of advancement to the professional level. In addition, the existing staffs in planning offices, whose work has changed drastically in the last few years, should have the opportunity of bringing themselves up to date.

Other recommendations are as follows:—Team leaders should not be restricted to any particular type of planner but chosen for their professional ability and suitability for a particular job. There should be staff courses of three months full time duration, with government or local authority grants. Team members should have a post-graduate course of the duration required by the Town Planning Institute. Associated specialists should have a short non-qualifying course. Existing office personnel should have refresher courses for senior members and training classes for junior staff.

THE HOUSING ACT

THIS Act came into force on July 30, 1949, and in effect makes the Housing Act, 1936, generally applicable to all houses instead of to working class houses only.

The term "working classes" has now no statutory meaning, and in interpreting the 1936 Act the Court had already held that the use of the expression in statutes was inappropriate to modern social conditions and that there was no such separate class as the "working class." The Legislature has presumably realised that there would be little point in providing only for a legally non-existent body. There must be a corpse or its remnants to enable the coroner to function.

The Act gives some encouragement to private owners to assist the housing situation by authorising grants towards the cost of conversion or improvement of dwellings. The maximum grant per dwelling is £300, based on a maximum expenditure of £600, and a flat is included under the term "dwelling." Schemes so provided must have satisfactory accommodation for not less than thirty years and must conform to the standards of fitness prescribed by the Minister of Health. Maximum rents will be fixed by the local authority, subject to certain exceptions, and the accommodation must be available for letting unless occupied by the applicant or a member of his family. The fact that maximum rents are to be fixed must be borne in mind, and it is essential that before any schemes are started that the maximum rent is ascertained. If the return on the outlay for a conversion is no better than an investment in securities it would seem to follow that, human nature being what it is, the private owner may not be willing to embark on the task of obtaining approvals and licences if his recompense is to be little more than if he invests his money in other ways. Local authorities should have this aspect of the matter in mind if it is really intended that additional housing accommodation should be provided other than by them. If the Ministry wish for the assistance of private owners in providing additional accommodation, then it should be indicated that maximum rents should have some regard to a reasonable return on the outlay. If the private owner carries out work at his own expense over and above the maximum allowed by the Act then the rent may be increased by not more than eight per cent. on the cost of the work over the maximum. This may, or may not, be an indication of a reasonable return on outlay in the opinion of the Legislature.

Further assistance is to be given to private owners for the conversion, repairing or improving of houses, by loans limited to ninety per cent. of the value of the mortgaged interest, with the freehold value of the house or flat not exceeding £5,000. The present limit of £1,500 on the market value of houses, for which councils may lend money for purchase either under the Housing Act, 1936, or the Small Dwellings Acts, is raised to £5,000.

The control of the selling price and the rent of new houses built under licence is extended until December 20, 1953,

and this control will now apply to licensed conversions. The basis of the selling price is the cost of building, cost of roads and sewers, restricted land value, development charge and any fees and charges incurred, and the local authority should be supplied with such information so as to enable them to fix the maximum selling price.

Private owners are no doubt ready and willing to assist in providing additional housing accommodation and it remains to be seen whether those whose duty it is to administer the statutory controls will do so in such a way as not to discourage private efforts.



The Architects' Journal

9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1

Phone: Whitehall 0611

N O T E S

&

T O P I C S

USSR UNDER CONSTRUCTION

Many who went to hear Professor Bernal's talk on building construction in the USSR last week hoping to hear of startling and exciting new developments will have come away disappointed. As the lecturer himself said: "The Soviet building site might be the 'Thatched Barn' Research Establishment blown up many times larger than life." It seems that the main difference lies in the fact that the new equipment is actually in use on a large scale. I suspect one of the reasons for this lies in the fact, described by Prof. Bernal, that large Soviet jobs are very densely manned. It is quite clear, for example, that the brick-laying technique described at the lecture is only possible when there is

ample labour available and could not be operated under conditions when practically every job is grossly undermanned, as is the case in this country. It would have been interesting to have had figures in terms of man-hours per unit volume of building work to see what kind of dividend is paid by the Soviet method of building construction.

*

The listener must have been impressed anew with two characteristics of the Soviet building industry. Firstly, the ruthless, whole-hearted gusto with which new work on an enormous scale is carried out, and the great opportunities that lie before architects and technicians in terms of construction. Secondly, the remarkably formal conception of architecture and building design.

ASSOCIATESHIP RIBA

I am no great advocate of examinations, but the decision of the RIBA to hold examinations on professional practice separately to the RIBA and Schools of Architecture Finals does ensure two things. Firstly, that the students will have to undergo a full twelve months' practical experience in an office or on a building site before qualifying. Secondly, that until this separate exam. is passed, the student will not be entitled to put the letters ARIBA after his name.

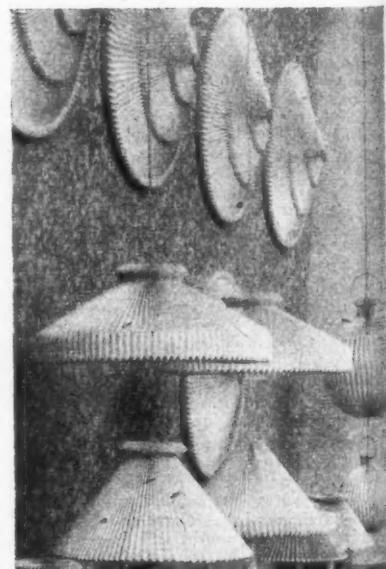
*

My only regret is that the period is not longer. When one considers the large number of recently qualified men who are working largely in the category of draughtsmen, in the offices of architects, who, in turn, apart from the odd exhibition stand or similar trumpery, have not actually put up a build-

ing of note since 1939, then I think there is obviously a grave risk of the value of the associateship being debased. A qualification of this nature should mean more than just five years' school training and the possibility of a year at an office drawing board. It should mean that, besides academic training, the holder has been largely responsible for the design and construction of at least one building which hasn't crippled the client with maintenance costs.

PRESERVING THE ROW

Horace Walpole described Antonio Verrio, who painted the murals round the staircase of No. 11, Bedford Row, the headquarters of the British Federation of Master Printers, as "an excellent painter for the sort of subjects on which he was employed, that is without much invention and with less taste." Nevertheless, the murals are worthy of presentation and the Master Printers and their architect, J. A. Wood, are to be congratulated on the care they have taken over the alteration and enlargement of their headquarters. It seems unfortunate, however, when so much trouble has been taken, that swing doors (see illustration), so entirely out of keeping with the rest of the design, should be hung in the new doorway on the staircase



Those who admire the lampshades of Kaare Klint will no longer be forced to enjoy a trip to Denmark to obtain them as they can now be bought in this country. Above are some of the many designs available.



The staircase of No. 11, Bedford Row, the restored headquarters of the British Federation of Master Printers. (See Astragal's comment below and photographs on page 451).

landing. Don't spoil a good effect, Mr. Wood, for a ha'penny worth of reproduction.

*

Before the war, the stricter modernists, and, I'm afraid, those in the backwaters of the modern movement today, when given the job of rebuilding a house in Bedford Row, or for that matter, Bedford Square, would design a building in "the modern manner" with, perhaps, a slight concession in the lines of roof and windows to enable it to be "in harmony" with its neighbours. The temptation of self-advertisement would prove too great for some architects to be content just to restore the house and thus preserve the original design of street and square. I do not suppose, however, that many today will object to Mr. Wood's decision to keep the front elevation just as it was.

*

While on this subject, is it not time that architects be made responsible not for individual buildings but for entire streets and squares so that the whole development of a limited area is in the hands of one man? The architect has not yet been born who, given the task of developing, say, Oxford Street, as a whole unit, could make it look worse than it does now.

EVERY MAN HIS OWN BUILDER

Mr. Frazier Forman Peters, an

American architect, has written a book* in which he suggests that building your own house with your own hands is not only a means of saving a lot of money, but a very satisfying activity into the bargain. He is honest enough not to shirk the difficulties, and is quite prepared to let you spend three years of your spare time on the job. However, he divides it into steps, and gives you not only a suggestion of the hours required, but a list of the materials and the tools necessary. In a country where timber is easy, he plumps for concrete, or stone faced concrete walls, but he uses most of the shuttering timber later on. He recommends, I think rightly, that professional plumbers and plasterers should be employed, but I should have thought that the electrical work (fairly simple) would be well within the capacity of anyone handy enough to manage the rest of the job.

*

I don't much admire Mr. Peters's plans, but they are adequate as a peg to hang his instructions on, and his clients seem to like them. Mr. Peters has endless patience with his amateur builders, and if you tried the same thing here I think you'd find yourself in for a lot of week-end bricklaying. In fact you might even find it less trouble to revise Mr. Peters' book to suit British techniques. Perhaps, it

* *Pour Yourself a House*. F. F. Peters, McGraw-Hill Book Co. Inc. \$3.95

was the week-end work which caused Mr. Peters to write it in the first place, though I should add that he obviously loves building himself, with his own hands, and wants you to enjoy it too.

ASTRAGAL

LETTERS

L. C. Howitt, F.R.I.B.A.

R. Chanlish

John Gloag

"Utilitarian"

J. H. Leech, F.R.I.B.A.

Architects Registration Act, 1938

SIR.—Mr. G. B. J. Athoe says that my letter is "redolent of the red herring," but it is the red herring which he himself introduced into an interesting discussion on the legal interpretation of the word "architect" in a form of contract. This particularly fishy product is now disowned by its author who appears to regret the consequences of his diversion and wishes to forget his own irrelevancies which concluded with a paragraph about "the machinations of a professional body to make architecture a 'closed shop' in its own selfish interest."

The author of wild statements of this sort obviously directed against the RIBA must not expect to remain unchallenged or imagine that feigned indignation is an effective substitute for a direct answer. Mr. Athoe has failed to answer my three questions relating to architect members of the IAAS; data about total membership is irrelevant. It is useless to refer me and your other readers who are not members of the ARCUK and the Statutory Board of Architectural Education to the records of those bodies.

I therefore repeat my question. When did the IAAS hold its last qualifying examination for architects? How many sat and how many passed? What percentage of the architect members of the IAAS have passed this qualifying examination?

Perhaps no answers can be given?

LEONARD C. HOWITT.

Manchester.

Overhead Wires

SIR.—Reference your recent comments re the electrification of the suburban train service between Liverpool Street and Shenfield that the "overhead system is good enough for the East End," but does not compare with the third rail system, and should not be tolerated on any possible main line electrification. While fully agreeing that the overhead system leaves much to be desired, from this snobbish quotation, one is led to believe that the feelings of the East-enders do not enter into the matter at all; whereas they are entitled to receive of the very best in the way of transport—and all services—long overdue.

East-enders on the whole are industrious and hardworking craftsmen, viz. tailoring and furniture-making being only two of many East End industries, the results of which are shared by many people in all walks of life. Many notable people have come from the East End, and have helped to make many reforms possible for their old associates and others. So let us have a little less of this



COMBINED CAR P

The main features of this department store in Westchester, Los Angeles, designed by Gruen and Krummeck of Hollywood, are the provision of car parking facilities on the roof, the location of the main entrance in the centre of the roof and the absence of conventional shop windows. This type of construction was used so that the clients' requirements could be satisfied within the financial limits imposed. On the left is one of the two car ramps which pass each other diagonally on the west side of the building. Below, left, is a restaurant on the roof, showing the car park outside. The restaurant, together with a beauty parlour, children's nursery and auditorium, were built on the roof to give the impression that the store was a two-storey building. From the main entrance, on top of the store, customers descend by means of escalators and stairs to the shopping area, as shown in the photograph below. The sales area at the foot of the escalators is reserved for articles which are usually considered to be ground-floor merchandise. The other departments radiate from this centre. The departments are separated by six "pylons" which are, in fact, small two-floor buildings which accommodate offices and fitting rooms. At the top of the opposite page is a view of the building, showing how the use of vertical fins gives an impression of height. Beneath it are (left) another view of the restaurant and (right) a photograph showing one of the subsidiary entrances and the free-standing display windows, set at an angle of 30 deg. to attract the attention of passing motorists.



looking down on the East-enders. They don't want to be spot-lighted with praise or publicity, but just given a square deal.

R. CHANLISH

London, E.5.

[Our correspondent misunderstands the purpose of the remark about overhead wires. These were criticized for spoiling the appearance of the country they traversed. The East End of London's appearance has already been spoilt; it has a confused skyline to which a few more wires will make little difference. There is not, therefore, a strong case for objecting to the use of this system in this area, as there is in the open countryside. Astragal's comments were certainly not based on snobbery.—Ed.]

Digestive Chair

SIR,—On September 1 Astragal illustrated a metal rocking chair, described as "Dr. Calvert's Digestive Chair," from a photograph supplied by Mr. Ernest Race. I was

particularly interested in this illustration, which I saw for the first time upon my return from Denmark a few days ago, because the chair is almost identical in design with the metal rocking chair, used by Hans Andersen, which is preserved in the Hans Andersen Museum at Odense. There are certain minor differences in the design; the iron members of Dr. Calvert's chair being of flat section—so Mr. Race informs me—and those of the Hans Andersen chair being of semi-circular section. It is possible that Hans Andersen's chair was acquired in America, where this type of chair was popular in the second half of the 19th century.

London.

JOHN GLOAG

Economics and Aesthetics

SIR,—Now that the building and rebuilding of business blocks has started, would it not serve a useful purpose if a little less, and, in some cases, a good deal less, of the artistic

write-up of jobs was dropped and statistical data substituted? This would allow the comparison of different buildings.

In this class of building, rentable floor area is the ultimate criterion and a minimum of waste is a measure of the planning. A few words would suffice to describe the amenities, the appearance, terrazzo floors, colour scheme, etc., etc.; these are features to be seen and given a value by a prospective tenant. Cost, expectation of life, and yield are aspects of interest in a wider field.

"UTILITARIAN"

The Knowledge of Priests and Architects

SIR,—I do not think that Astragal need be so astonished at a vicar's pronouncement that, among other things, a successful priest should have "the knowledge of an architect." I have had a good deal to do with the clergy for a number of years, both as

PARK AND DEPARTMENT STORE, USA



a diocesan surveyor and an ecclesiastical architect, and I would say that there are very few parsons who at some time or another have not had a great deal to do with new building operations in respect of churches, halls, vicarages and farm-buildings, etc.; or with the repair or renovation of all or any of these classes of buildings; or with such things as acoustic problems, interior decoration and furnishings, lighting and heating installations, water supplies and drainage; not forgetting the financial side, where it is almost a necessity for the parson to have at least a working knowledge of building prices, and an accountant's ability to raise funds and obtain grants and loans from diverse sources to pay for such things. In addition to all of which he is expected to be able to read and understand architects' and engineers' working drawings; to have an educated taste in art and architectural design; a knowledge of archaeology, and an ability to discuss and discourse intelligently on such subjects—which he

surprisingly does—with learned people from the professions and others equally learned from specialist trades.

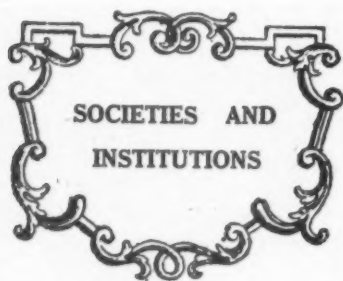
Even if the parson, through fortunate conditions of his parish, is let off these sundry matters, he is faced every five years with an extensive survey and inspection of his house, glebe buildings and glebe lands, for repairs under the Dilapidations Measures (which latter are quite complicated enough in themselves). Here, again, he may be the fortunate possessor of a modern vicarage, with no glebe buildings and lands to worry him; or, which is much more likely and common, the unfortunate possessor of an enormous old-fashioned vicarage, which continuously drips water on him from an incurable roof, or seeps up from the walls and floors; where the only water supply is from a doubtful well which dries up completely in time of drought; or where modern drainage is almost non-existent; and where, if he does not die prematurely from pneumonia, rheumatic fever, typhoid or

diphtheria, he manages to exhibit in a practical way an astounding knowledge of things architectural and constructional, and exercises his skill in the use of saw, hammer, chisel and blow-lamp in an endeavour to keep the old place from falling about his ears.

Truly the vicar was right about the required knowledge of an architect. I am sure you will agree that something more than a superficial knowledge of dry rot and death-watch beetles and an ability to slap on a bit of distemper is required. Which leads me to be tempted to suggest that a successful architect should have the knowledge of a priest, where the exercise of the priestly qualities of patience, and Christian forbearance in suffering fools—if not exactly gladly—would no doubt be of considerable benefit to we harassed and frustrated architects in this present age of restrictive practices!

J. HOWARD LEECH.

Harpenden.



Speeches and lectures delivered before societies, as well as reports of their activities are dealt with under this title, which includes professional societies, trade associations and government departments.

To save space they are represented by their initials—see front cover.

Lectures cannot usually be reported in full, but the extracts given are in the speakers own words.

ILA

Thomas Sharp

October 20. Presidential Address given to members of the Institute of Landscape Architects, 12, Gower Street, W.C.1.

Thomas Sharp: The 20th century Englishman is the inheritor of a landscape that was largely created or directed by his 18th century predecessors. And we in our profession are the successors of the 18th century improvers of landscape. But we are given more than an inheritance. We are also given an opportunity. An opportunity which is in some respects remarkably similar to that which was so admirably used to produce what we now inherit: but also one which is in some other respects even greater in its range and possibilities than that was.

Consider for a moment the parallels between the 18th century opportunity and ours today. The changes which in the 18th century altered the face of a great part of England and turned it from a bare and patchy universality into its present lovely and humanized individuality were the results of social, economic and mechanical advancements. The reorganization of the system of land tenure, and the development of agriculture through the production of new types of crops and new methods of producing them, were the causes of change

then. And so they are today. But the Englishmen of the 18th century didn't merely let them happen without considering their effect on the landscape, or bemoan them with a sentimental cry for preservation. They accepted them for what they were—they accepted them as opportunities for landscape improvement. It rests upon the people of England as a whole, and upon our organizations of national and local government, to see to it that the same opportunity is not missed today. It rests upon us doubly as landscape architects, for we have, in addition to our responsibility as members of the community, the responsibility, as people whose special concern the landscape is, to see that the opportunity is not only seized but is used aright.

CHRISTMAS-TREE LANDSCAPE

I cannot this evening discuss the details of the changes in landscape which may result from the changes in agricultural economy. Many of these changes may be broad and bold in their effects; and many more will be of a subtler less obvious kind. But there is one change that I should like to refer to a little more definitely by way of example, because it involves a far more revolutionary modification of landscape than any purely agricultural change is likely to require—the change arising out of large-scale afforestation.

I confess that I am one of those who do not much like the landscape that great conifer forests produce. I have seen whole valleys of my native Northumbria changed out of recognition during the last twenty years. And I have deeply regretted the loss in *aesthetic* pleasure which this change has brought—naturally so. I think, for most of us grieve at the loss of a loved landscape. But clearly we must not judge change only on its *aesthetic* results. The landscape is primarily a place of economic activity. We must admit to it every form of activity which, in the balance of various considerations, contributes to the welfare and prosperity of the nation. Softwoods are a crop as much as wheat is, or cabbages, or sheep; and, if the value of the crop is greater than the values it displaces, then the growth of the crop is a contribution to the national good. If the balance of the national good requires a particular development of this or any other kind, then, as landscape architects we must accept that development and play our proper part in producing from it the best possible results that we can achieve in terms of landscape.

But while we cannot judge change only or even primarily, on the *aesthetic* effects resulting from it, we can only at our peril ignore *aesthetic* values. They, too, are an important part in the national good. The English countryside is among the noblest of all the works created by man. It is, I believe, along with our poetry, England's greatest contribution to the arts of civilization. Impoverished and hard beset as we are, it will need very strong arguments, indeed the arguments of extremity, to justify any developments which will destroy or strongly modify the characteristic landscape of this country. Our proper work, it seems to me, is rather to actively maintain that landscape by the deliberate replacement of its dying constituents in hedges and broad-leaved trees. If there must be planting of conifer forests then it should be in places away from our characteristic countryside, on northern hills, or especially in Scotland where, in any case, even the cultivated country is much nearer to the universal landscape of agriculture than it is to the softly humanized countryside of England. And even here there are special values that must be respected. Special scenic values as in the English Lake District. Special recreational values in the neighbourhood of towns; for even when forests are made free they cannot

offer the townsman the same sense of release as the open countryside does—the trees crowd as houses crowd, the views are enclosed, the sky is still impaired. These and other special values must be considered even in places where the traditional characteristic countryside is not at stake. And even in these places which may properly be afforested, in the balance of the national good, the details of the planting itself must be so undertaken that the new landscape is good of its own kind. And it is here especially, in the siting of rides, in the treatment of the forest edges, and in many such matters, that the landscape architect, having played his part in the broader planning, has his particular and specialized contribution to make in terms of landscape design. Much the same kinds of consideration apply to activities which are not concerned with the raising of crops, but with the exploitation of mineral resources (as in mining and quarrying) or with public works (as in the construction of hydro-electricity undertakings and other power-producing works, or in the building of roads, railways or aerodromes).

MONSTROUS MONUMENTS

Here I would like to digress for a moment or two from my present point to consider the problem of whether the town landscape or the country landscape is the more capable of absorbing the great erections required by some of our modern public utilities. It seems to me that the greatest obstacles to the achievement of decently humane towns today are the monstrous buildings required for electricity works and gas works. Almost every town in the country is dominated to a bitterly cruel degree by these things. Strangely-shaped cooling-towers, cloud-piercing chimneys, vast turbine-houses, retorts and gasholders overtop everything with an irredeemable brutality; cathedrals, churches, universities, town halls, to say nothing of all the little streets of little human houses, are crushed beneath their awful bulk. All spiritual values are quenched by these vast manufactures and symbols of anonymous energy and power. Now I do not wish to be misunderstood. I am not speaking of these things in any *aesthetic* sense. They may have great *aesthetic* and dramatic qualities as abstract shapes. But that does not help them in the town, for they outrage the human scale, to which all things in a town must be related; and they outrage the spirit of man in the place of his own creation. It seems to me that there must be something seriously wrong with a civilization which lets these monstrous erections be built in its towns with scarcely a murmur of protest except when they damage some special place, like, say, Oxford or Durham.

This may perhaps seem to you to be a digression into the field of town planning; but I have made it for a purpose. For what I want to suggest is that these things should not be in the town at all, but rather in the countryside, away altogether from the human habitations which they now outrage. Even though the English countryside is the most humanized in the world, and even though the scale of nature has been deliberately reduced there and brought within easy human apprehension by the breaking up of natural distances into a succession of small units—in spite of this the human scale is not the inevitable measure in the countryside as it must be in the town. And the main offence of these inhumanizable utilities would be at least greatly diminished if they were built in rural rather than urban places. I think, indeed, that it would disappear altogether.

Now I know very well that such a suggestion will give offence to many people. They will argue that one of the supreme attractions of the countryside is

that it is only there that one can escape from the more hideous works of man—indeed (and it is a strange thing in so humanized a country) most people would say that it is only there that we can escape from the works of man altogether. Why—it will be asked—why defile the country with what belongs to the town? But that merely shows what an ignoble view has been taken of the town in England during the last hundred years. Ugliness, squalor, defilement are held to be the natural or at any rate the unavoidable attributes of the town—which, of course, is why it is what it is. But as I have said, what is offensive about these great structures is not their appearance as such; it is in their size in relation to the human scale. In the countryside, provided that their situation were well-chosen—clearly, for example, they should be in a hollow rather than on a sky line, and among trees rather than in a bare place—provided they were well-sited, well-designed in themselves, and their immediate surroundings well-landscaped, they would, I believe, be far less damaging to the human spirit than they now are in the towns.

LANDSCAPE AND TOWNSCAPE

I must now pass to a brief consideration of some aspects of the landscape treatment of far smaller spaces than those of the countryside, namely, those of the town. I do not propose to speak of the detailed design of either private or public gardens or parks. Though the English people in general may still lead the world in their love and understanding of most of the natural constituents of gardens and parks, and especially of flowers, the standards of the use of the various materials to make a satisfactorily whole design of them, especially in public places, is by no means as high as the standards attained in the cultivation of the natural materials themselves. Perhaps, indeed, the love of flowers and the perfection achieved in cultivating them, itself to some extent militates against the cool consideration of their use in the co-ordinated design of much-frequented places. I do not wish it to be thought that I am suggesting that the design of private gardens or of public parks in this country is inferior to that in other countries. On the contrary, in spite of what I have just said, I believe that it is not. But I think that design in small public gardens is; and I think that there are evidences that we are at present being actually retrograde rather than progressive in the matter of bringing urban open spaces into proper terms with their urban settings so as to constitute what may be described as townscape. And by that I mean urban scenery considered as the combination, the integration, of the open and the built-over parts of the town, and within that combination the effective inter-play of the various elements of both parts.

Let me give one or two examples of what I mean, here in London. Take Leicester Square garden. Until the recent war it was a railed-in affair of paths, lawns, trees, flower-beds and seats—all on two or three hundred square yards at the very heart of this great metropolis, and the only open place alongside the surrounding busy streets. When the railings were removed during the war, the lawns and flower beds were trodden out of existence. But the whole paraphernalia is now being reconstructed, with every bit of lawn surrounded with concrete posts and chicken wire to keep the public off the unnecessary grass. It looks like nothing so much as a series of absurd little chicken runs. Now I maintain that the public were quite right to tread it down during the war; and that those who are trying to turn it into a

garden again are wrong. The place is far too small to serve as a garden in this congested locality; and it can only be kept as a garden by denying its use to a lot of people who would otherwise frequent it. This is the kind of busy square which should be decently paved and left wide open, as I am sure it was, in common with all the early London squares, when first it was developed. There are one or two other places in central London which should be given the same kind of treatment; but this is the most obvious of all. In our love of grass and flowers we seem to have lost the understanding that a well-paved square, especially if it has trees, like Leicester Square, can be good to look at. In this respect we can learn a great deal from continental countries. An occasional paved square is a very desirable as well as a very necessary feature of central-city townscape.

An example of a different kind occurs nearby, at St. James's Square, the home of the Ministry of Town and Country Planning. This, too, like most other central London squares, suffered a good deal during the war; and this was one of the first to be rehabilitated. Its lawns were resown, and very sensibly its trees were thinned a little; but, not so sensibly, its boundary shrubberies were maintained and a new boundary hedge planted round it. Now St. James's Square garden is much bigger than Leicester Square garden; and it is an altogether quieter locality. So it is right that it should retain its lawns. It may even be right (though I will not attempt to argue the point here) that it should be kept locked up. It was also right, when it was used as the common garden of the houses facing the square, that it should be hedged in for privacy. But now that the facing buildings are all offices, there is no need at all for privacy; and even if the lawns themselves cannot be made free the views over them can. And I maintain, they should be. Where privacy is no longer required, or should be foregone in the public interest, the means of obtaining privacy, the high hedges, the shrubberies, are unnecessary and should be eliminated; and the landscape within the garden should be brought into and become part of the larger townscape.

METHODS OF ENCLOSURE

There are, of course, times when enclosure is required even when privacy is not. This is possibly the case in St. James's Square, and other places of like kind. It is also, we are told by the police, the case in Green Park. So something like a whole battery of obstacles has been set along the Piccadilly boundary of that park. First there is the old dwarf wall of the original railings, then the squalid concrete posts and chicken-wire, then a holly hedge, then a further fence of wired chestnut palings. It may be that all this squalor in the centre of the capital of the British Empire may be merely temporary; and some of the farmyard encumbrances may be removed when the holly hedge has grown sufficiently. But the essential and important point remains that this kind of enclosure is altogether wrong. Leaving aside the question of whether or not a prickly evergreen is just about the most inappropriate hedging in a city, the point I want to make here is that there should be no solid obstacle to vision at all. In these town parks, even more than in squares, the value of the space is almost as much in people being able to see into it as in being able to go into it.

The number of people who enjoy the mere sight of Green Park when going along Piccadilly about their daily business is far greater than the numbers of those who

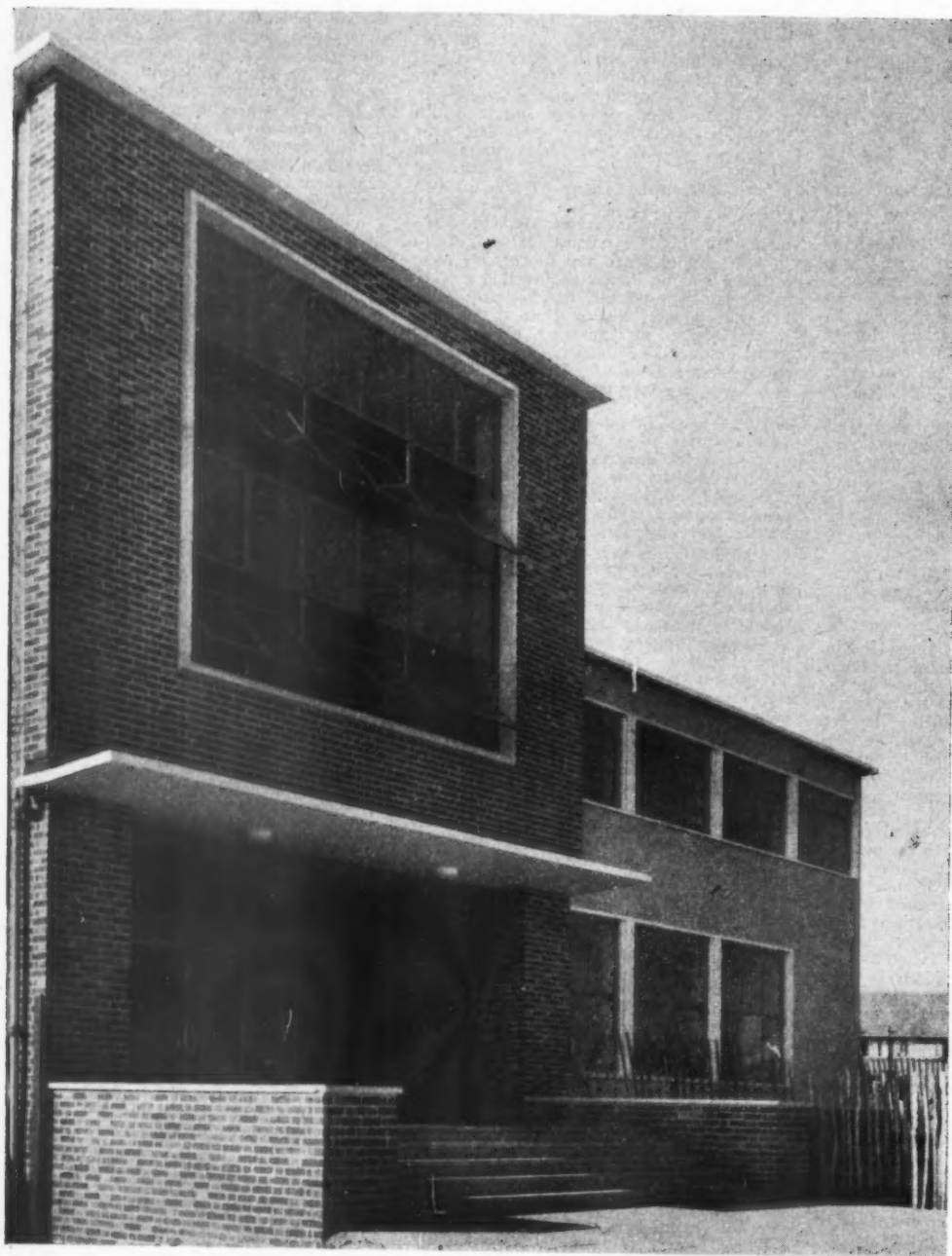
actually get inside. The holly hedge, or any other solid boundary, will completely shut the park away from passers-by if it is allowed to grow sufficiently tall to keep people out at night; and even if it is kept to a height where one can just see over it, its intention will not only be impaired, it will remain a most objectionable interruption and an obstacle to one's external enjoyment of the place. The planting of this hedge is not only an anti-social act, it illustrates how insufficiently the purpose of landscape in the town is recognised today. If such places must be enclosed, they should be enclosed by open iron railings; and if such railings cannot be obtained for some time yet, it would be far better to use the chicken wire without the holly—and with a square rather than a diagonal mesh, and supported by something less crude than heavy concrete-strutted concrete posts.

USE OF TREES

These are one or two examples of failure to recognize the true nature and value of landscape in the town; and they are examples of the need for the wider recognition and practice of the art of landscape architecture. There are many other matters which I should have liked to refer to in some detail. I should have liked particularly to refer to the incidental rather than the monumental use of trees in street scenes—a use far more in tune with our English spirit than the formal avenues favoured by many other nations, and one which is far more sympathetic to architecture and produces infinitely more subtle and delightful effects in townscape. As witness of this I should have liked to analyse, for one example among innumerable others, the irreplaceable contribution made to the beauty of Oxford's High Street by that one miraculous tree which leans over the pavement between Queen's and All Souls; and, for another example, that group of trees at the middle of the concave side of the curve of Whitehall which is likewise of irreplaceable (if commonly unrecognized) value in that street of monumental buildings.

There surely should be no doubt, among those who have thought about the matter, that the strengthening and development of the art and practice of landscape architecture is a most necessary part of any activity towards preserving what is good and improving what is less than good in the scenes among which our lives are set. It seems to me that, within the next few years, if England's heritage of landscape is not to perish by neglect and mishandling, and if the opportunities of creating new beauty in town and country are to be achieved, then besides a body of private practitioners serving private and public needs, there should be landscape architects in the offices of every local authority in the country and in the central and regional offices of the Ministry of Town and Country Planning and all other Government Departments concerned with the use of land.

It is, of course, only too pitifully true that at present our members are too small to answer any such call if it came. What the solution of the problem is I do not know, unless it be that powerful agencies like the Ministry of Town and Country Planning should take a more active part in recognizing the need for the profession and in fostering its development. But of this I am quite certain, unless the art and practice of landscape architecture is developed and recognized, the hopes of having in this country an environment for living which has beauty as well as convenience can never by any possible means be fulfilled.



Main entrance of Horn Park Primary School, with uncompleted cloak-room wing on right.

SCHOOLS FOR THE LCC

BY ROBERT H. MATTHEW, ARCHITECT TO THE COUNCIL

DEPUTY ARCHITECT, DR. J. L. MARTIN
ARCHITECT, SCHOOLS DIVISION, R. WILSON
PRINCIPAL ASSISTANT K. J. CAMPBELL (until July, 1949 G. W. HOME)

I. HORN PARK P R I M A R Y S C H O O L

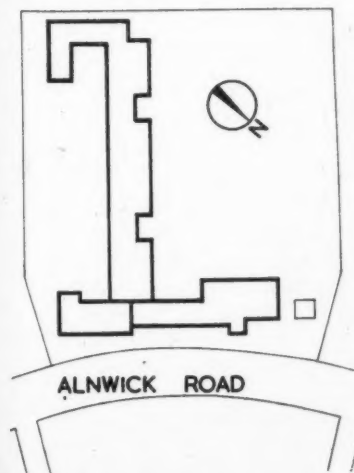
GENERAL.—This primary school, which will serve a new housing estate at Horn Park, Woolwich, was planned to allow erection in four phases, as follows:—(1) Six classrooms, lavatory and staff accommodation; (2) assembly halls, kitchen and dining halls, etc.; (3) further classroom accommodation; (4) nursery classes. Phase (1) has now been completed and phases (2) and (3) will be commenced at an early date.

SITE.—This is a level plateau on top of a small hill, falling away to the south, with views over open country.

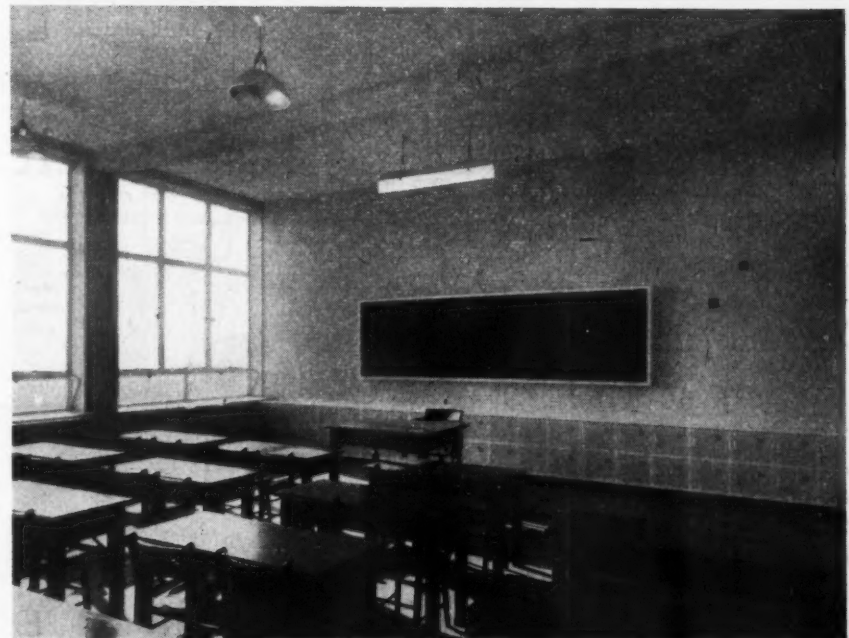
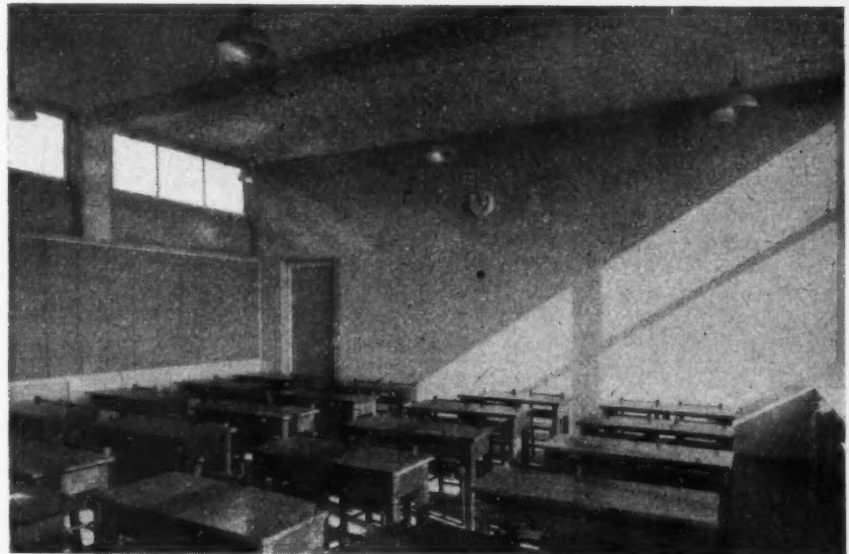
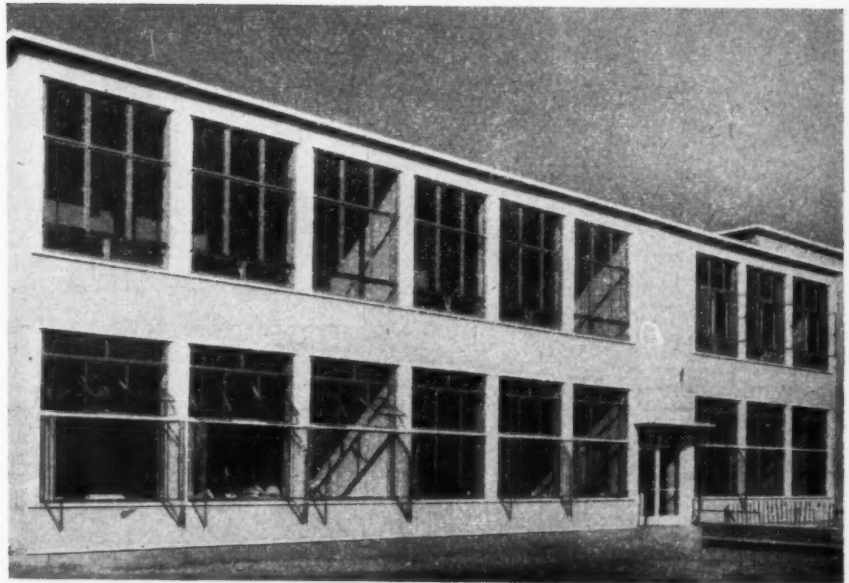
PLAN.—The classrooms are planned on two floors, with a southerly aspect. The main entrance will have direct access from Alnwick Road, and the assembly halls will be placed close to it for public use. The infants and juniors will be completely segregated and the lavatories are planned for ease of access both from the classrooms and the playground.

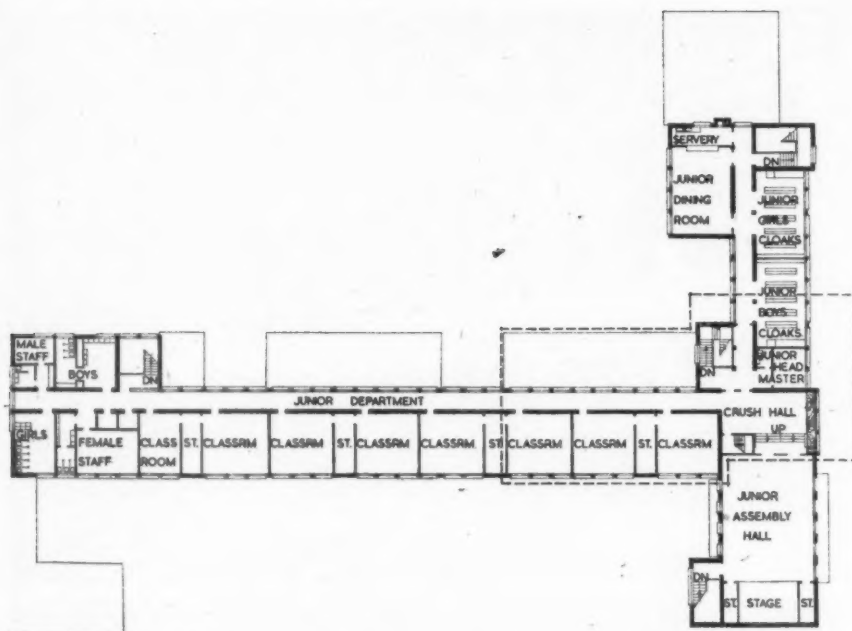
CONSTRUCTION. — Assembly halls, classrooms and administration block: precast concrete construction. Main entrance and

Top: the classroom block, containing six rooms, seen from the south-east. The block is the first stage of the school for 560 pupils to be completed. The wing will eventually be lengthened to contain sixteen classrooms. Centre and bottom, a typical classroom.



SITE PLAN [Scale: 1/32" = 1'0"]



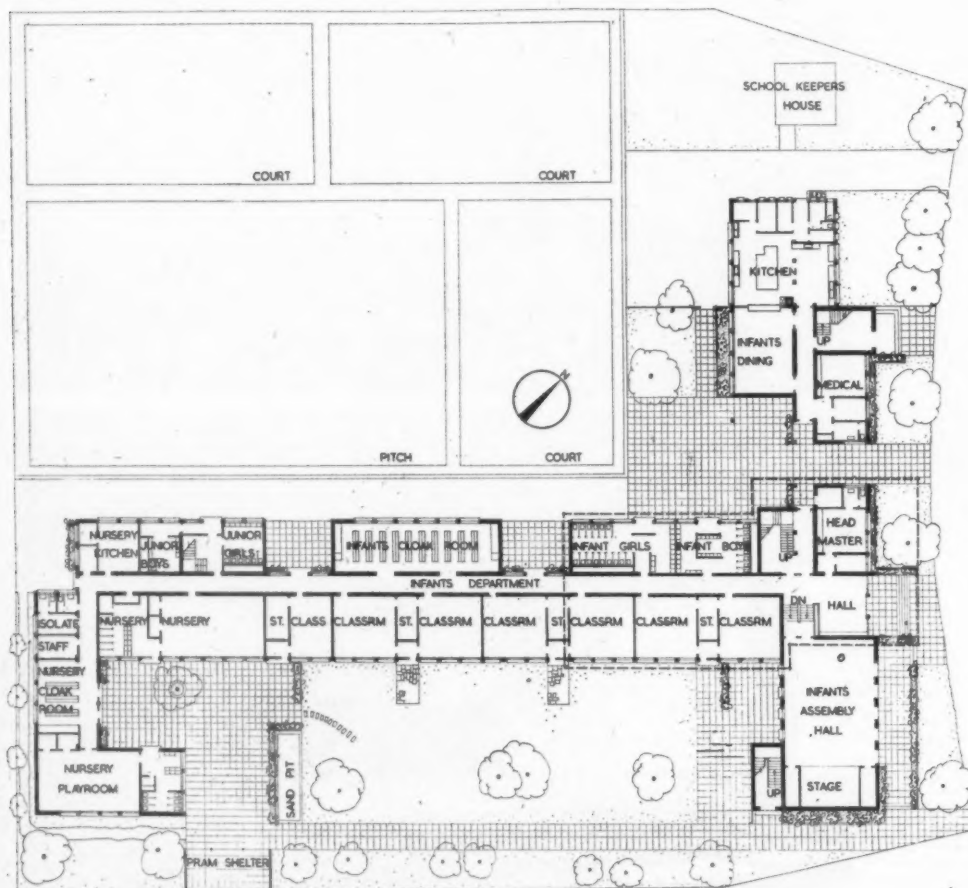
**FIRST FLOOR PLAN**

Completed section shown within dotted line.

staircase blocks : brick and in-situ reinforced concrete. External walls : concrete blocks faced with 2-in. Hopton wood stone with 7-in. cavity and 2-in. foamed slag core blocks internally. Floors and roofs : 2-in. precast concrete slabs supported on precast concrete secondary beams. Roof finish : foamed slag screed covered with three layers of bituminous roofing felt. Internal partitions : 2-in. precast concrete block. Windows : steel frames in precast concrete surrounds. Brick portions in 13½-in. cavity wall construction with reconditioned Portland stone surrounds and steel windows.

The assistant architects were T. Grierson, G. F. Horsfall, T. J. R. Winn, W. Martin, P. W. Dumpress.

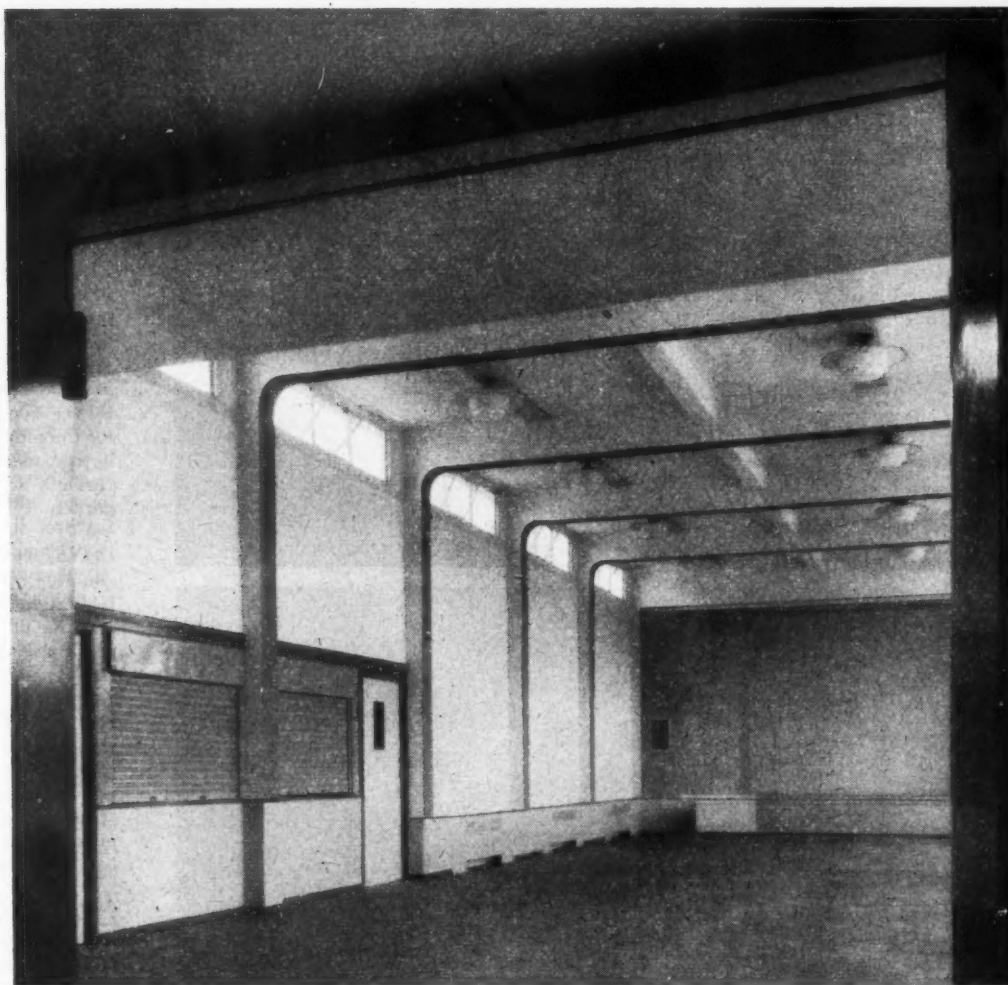
The general contractors were Messrs. Thomas Tierney & Co., Ltd. For list of sub-contractors, see page 478.

**GROUND FLOOR PLAN**

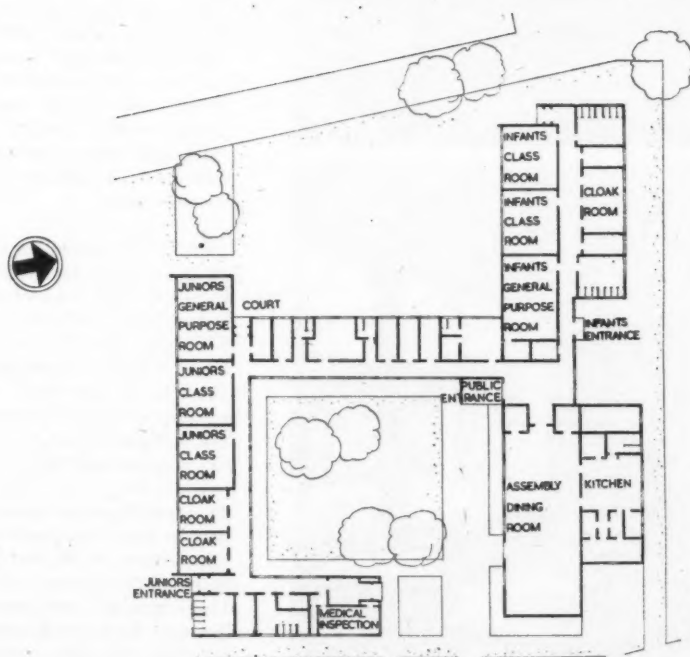
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Completed section shown within dotted line

S C H O O L S F O R T H E L C C



The assembly and dining hall, with the entrance to the servery and kitchen, left.



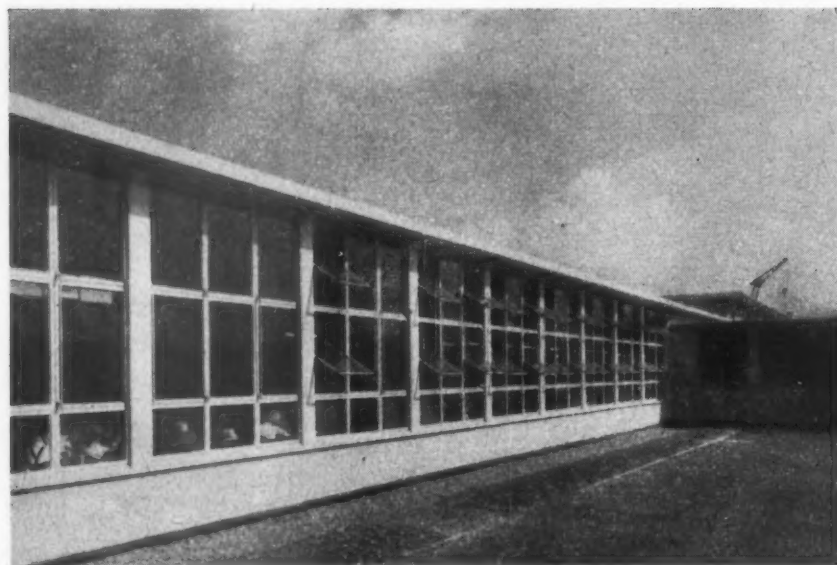
GROUND FLOOR PLAN [Scale: $\frac{1}{8}$ " = 1'0"]

2. REDRIFF PRIMARY SCHOOL

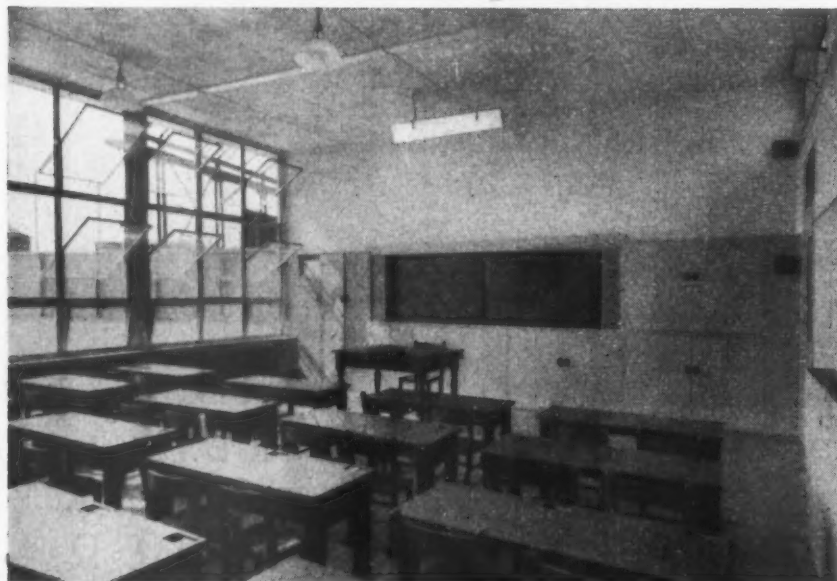
GENERAL.—This is one of a programme of 11 special light construction schools, and was built to replace a primary school demolished by enemy action during the war. The building comprises a one-form entry mixed infant and junior school for 240 pupils, and includes an assembly hall, which also serves as the dining room. The medical inspection room, in addition to serving the school, is designed to be used as a minor ailments treatment centre for the dock area adjoining.

SITE.—The school is located in the heart of the Surrey Commercial Docks. Only half the site was immediately available for development. The future extension comprises a playing pitch and garden, and is at present occupied by a temporary nursery school.

ARCHITECT : ROBERT H. MATTHEW



Top, infants' classroom wing of Redriff Primary School seen from the south. Centre and bottom, classrooms, showing variation in arrangements of tables and chairs, and the standard cupboards at the end of each room.



PLAN.—The teaching rooms are planned in such a way that the infant and junior departments are separate units connected by the staff accommodation. The medical inspection room is close to the road with separate access for the public. The main approach is by means of a paved walk through a court and the enclosed garden.

CONSTRUCTION.—A reinforced concrete raft forms the foundation for a light steel frame. The panel infilling of 3-in. wood wool slabs is clipped and bolted to the framework. Metal windows are fixed to pressed steel surrounds. The roof is a 2½-in. reinforced concrete slab cast on permanent wood wool shuttering, and covered with three-ply bituminous felt. The construction was designed to allow maximum standardization throughout the school programme.

INTERNAL FINISHES.—Extensive use has been made of stimulating colours throughout the circulation areas. Classrooms are treated in pastel colours to give a quiet background. **Floors:** laid with composition tiles; **dados:** cold cement glaze and other wall surfaces distempered; **ceilings:** wood wool slabs treated with plastic water paint. Standard classroom fittings include lockers, cupboards, blackboards and loud-speaker units.

SERVICES.—Heating is by means of low-pressure hot water radiators from gas-fired boilers. Hot water service, thermostatically controlled, is also provided by means of gas-fired boilers. Loudspeakers are fitted in all classrooms and assembly hall (controlled from the stage); the equipment has, in addition, a record playing desk.

The assistant architects for the design and construction of the school were A. W. Stringer, W. J. Smith, J. G. Cairns. The general contractors were Messrs. William Harbrow, Ltd. For list of sub-contractors, see page 478.

3. WOODBERRY- DOWN HIGH SCHOOL

GENERAL.—This is the first of the new comprehensive high schools to be planned in the London Area and it is designed as an eight form entry school to accommodate 1,250 pupils of both sexes mainly from the adjacent housing estate. In addition to the basic core of studies common to all pupils, the school will provide courses suitable to the needs not only of those who may be expected to leave at the age when school attendance ceases to be compulsory, but also for those who, as their studies develop, will require courses in some cases up to advanced sixth form standard on the practical as well as on the academic side.

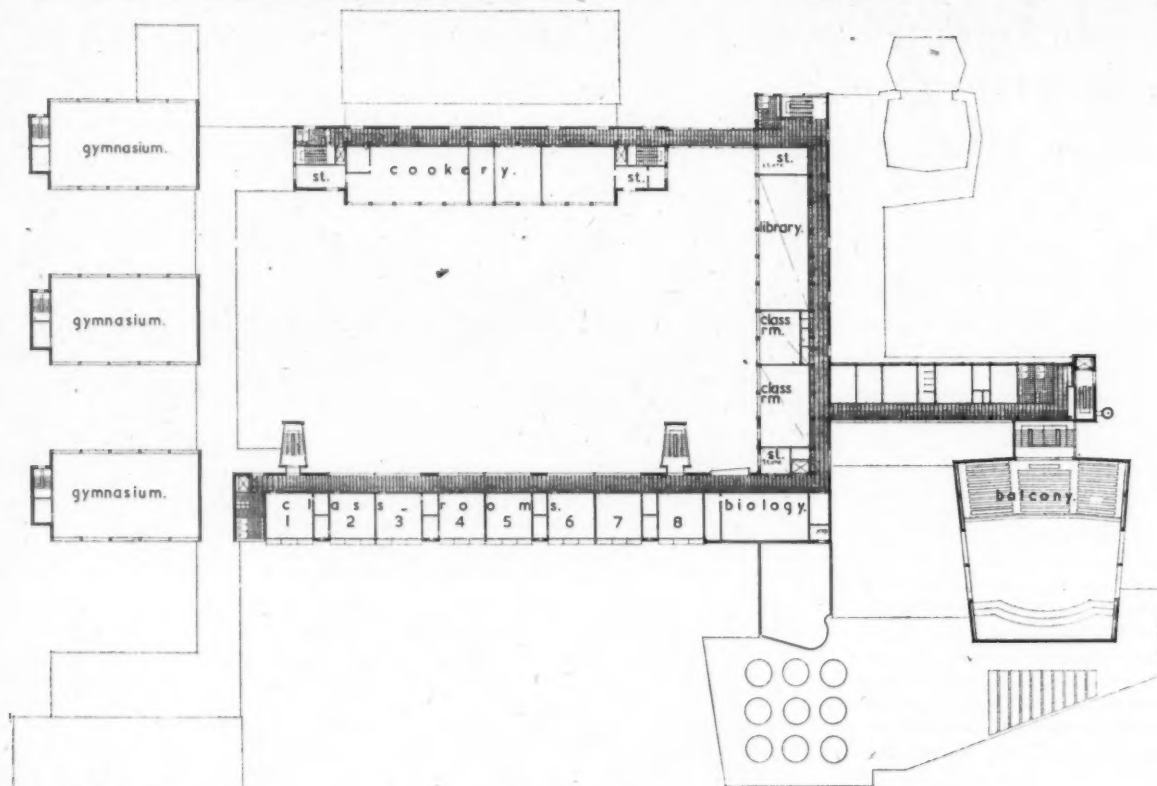
SITE.—This is restricted for a school of this size and totals about 5½ acres, sloping slightly to the south where it overlooks and is bounded by the New River and a large reservoir. A certain number of trees already existing will be retained.

ACCOMMODATION.—This includes a large assembly hall for seating 1,400 (partly in a gallery), the platform designed for orchestral and concert performances, and a smaller hall of approximately 2,000 sq. ft. equipped for dramatic performances. In addition to twenty-four classrooms, larger rooms are provided for needlework, drawing, geography, music and typewriting. There are four rooms for arts and crafts, five laboratories with two lecture rooms, a library, three gymnasia,

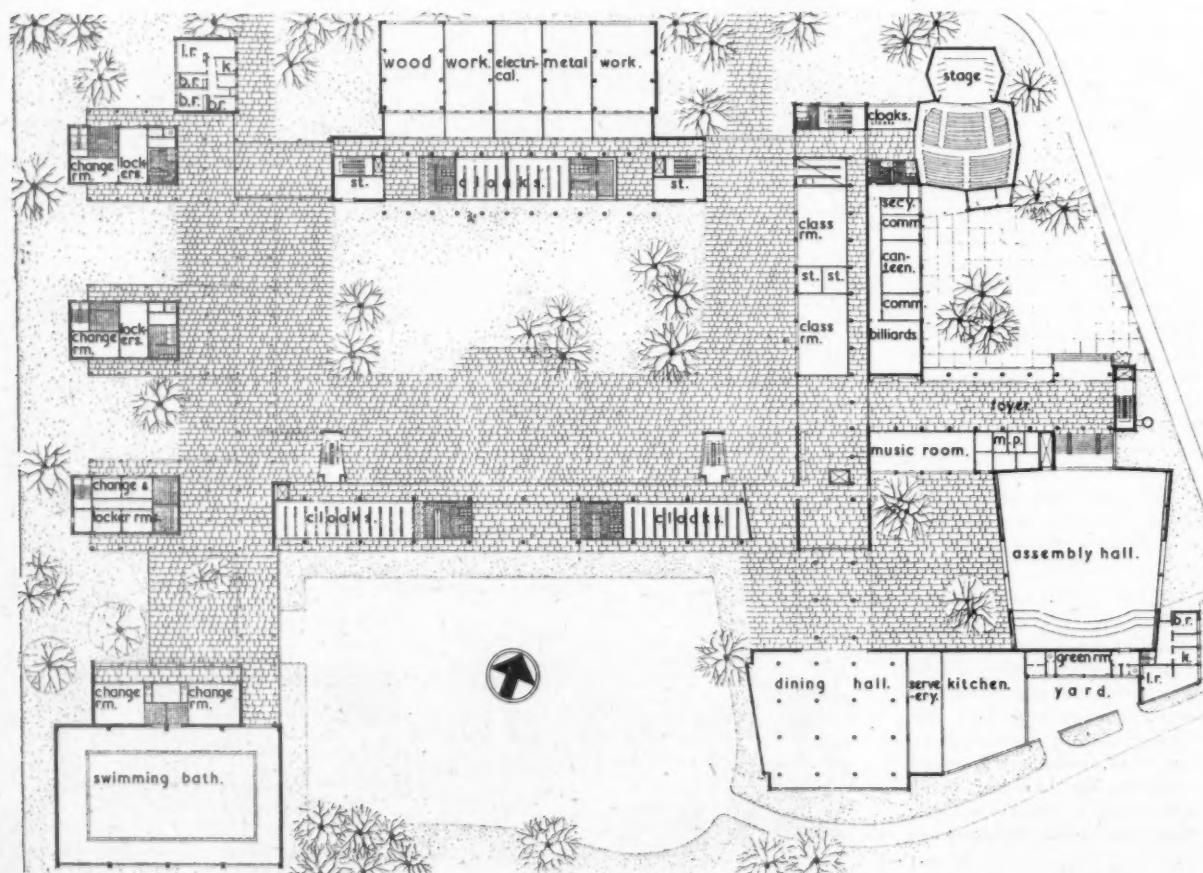
Top: the proposed high school from the west with two gymnasia in the foreground. Centre: from the north-east, showing the arts and crafts wing, with the workshops in the foreground. Bottom: from the south, showing the dining room on the right and the classroom, with greenhouse for biology classes, on the left.



ARCHITECT : ROBERT H. MATTHEW



FIRST FLOOR PLAN

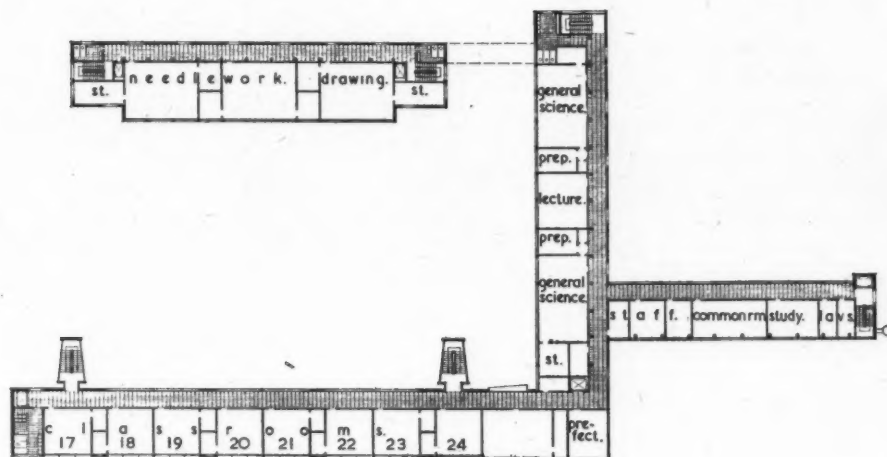


GROUND FLOOR PLAN [Scale: 1/4" = 1'0"]

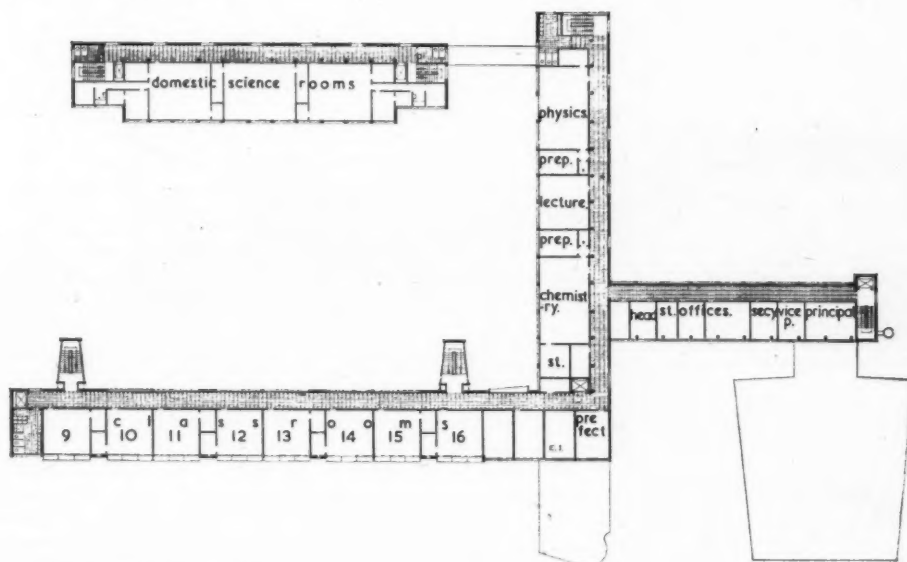
S C H O O L S F O R T H E L C C A



FOURTH FLOOR PLAN



THIRD FLOOR PLAN



SECOND FLOOR PLAN

[Scale : $\frac{1}{80}$ " = 1'0"]

and five workshops for technical subjects. For housecraft, including advanced cookery, there are to be five large rooms with two domestic suites attached. Other accommodation will include a large dining hall and kitchen, staff rooms, medical suite, accommodation for resident school-keeper and assistant and all necessary stores, cloakrooms, lavatories, etc. Provision has been made in the plans for a swimming bath. In addition, provision has also been made for community centre and evening institute purposes.

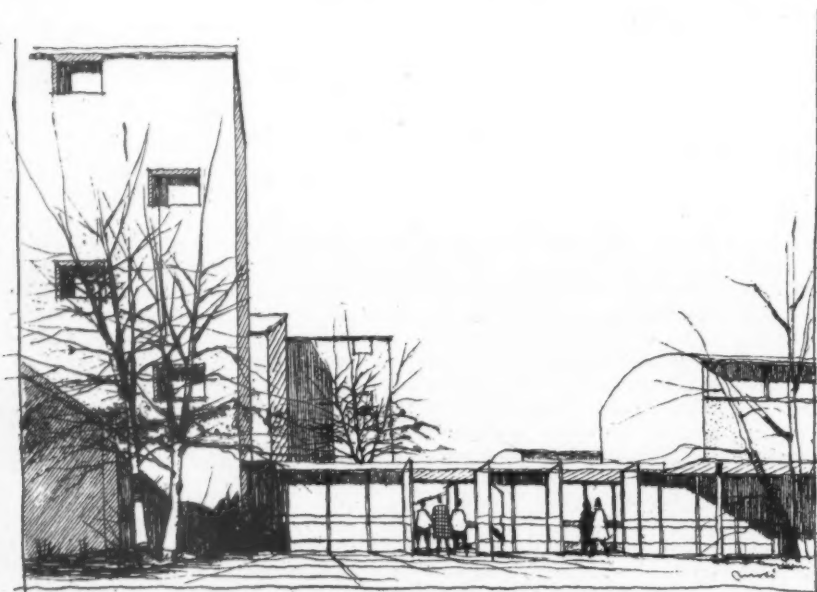
PLAN.—The school has been designed as a group of buildings informally linked together around the play spaces and courtyards, in order to avoid what might have been the overwhelming scale of one large block. The main classroom wing is in the south of the central courtyard and overlooks the New River and the reservoir, which form the southern boundary of the Woodberry Down Estate, Stoke Newington.

On the east is the focal group containing the main entrance foyer, assembly and dramatic halls, ad-

ministration and community centre accommodation. The dining hall at the south end of this group also overlooks the water. At the western end of the classroom wing are the three gymnasias, arranged in series with changing rooms under and approached by a covered way. At the south end of this group, and again overlooking the reservoir, is the future swimming bath. The plan is completed by the workshop and special subject wing on the north of the central courtyard. The pupils will enter by way of the wide courtyard

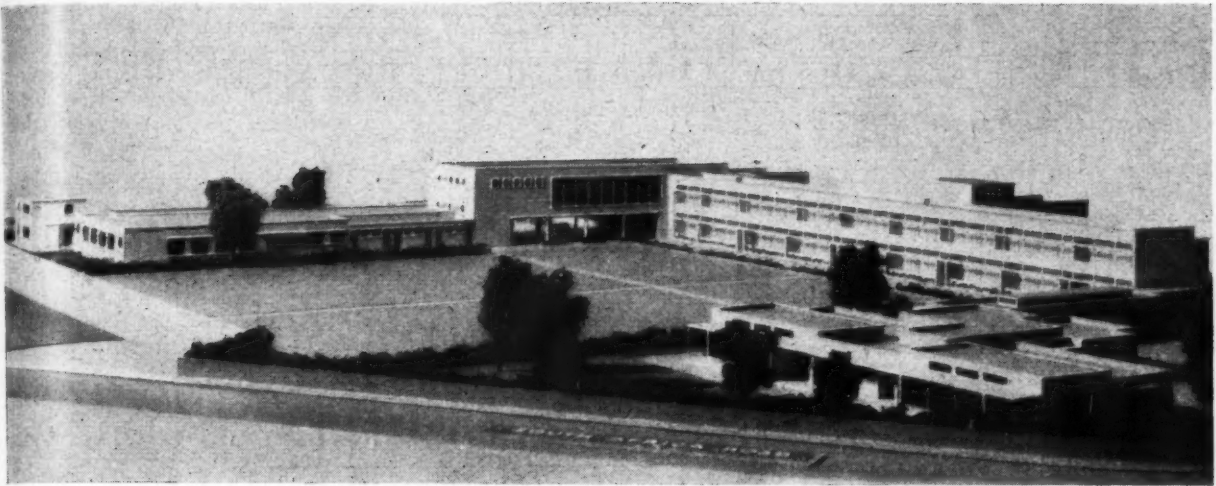


Top: main entrance front to Woodberry Down High School, with the small theatre in the foreground. Centre: the swimming bath, in the foreground, and the classroom block and gymnasium in the background. Bottom: from the north, showing the entrance to the gymnasium units.



north of the workshops, the cloak-rooms being placed under the north and south wings. The usual demand for paved play space necessitates the provision of a certain amount of tarpaving, but every opportunity will be taken to relieve this by means of gardens and lawns, and by leaving as many of the existing trees as possible. It is to be expected that detailed accommodation will be amended and varied as the school develops towards the building stage which is anticipated in 1950. Precise educational requirements will also develop with the final plans. Many architectural problems in design and planning are presented by this new school—problems of scale and atmosphere, and problems of horizontal and vertical circulation to obtain rapid assembly and dispersal and economy of space without congestion.

The assistant architects were:—A. Mackenzie, E. Broughton, J. Potter, K. L. Larsen, D. Gregory-Jones, D. Browne, M. Gooch. Perspective sketches were by M. Didriksen.



Model of the primary and nursery school and community centre seen from South Africa Road.

4. WHITE CITY PRIMARY SCHOOL

GENERAL.—The accommodation includes a primary school for 320 infants and 280 juniors, nursery school for 80 children and a community centre. The buildings are grouped round the eastern, northern and western boundaries in order to give the maximum privacy to the playground, and at the same time take the classroom windows as far away as possible from the adjoining blocks of flats and give them the maximum view and sunlight. This grouping also permits the entrance of staff, parents, visitors, etc., to the buildings without crossing the playground, and allows the provision of a "service" road on the northern boundary.

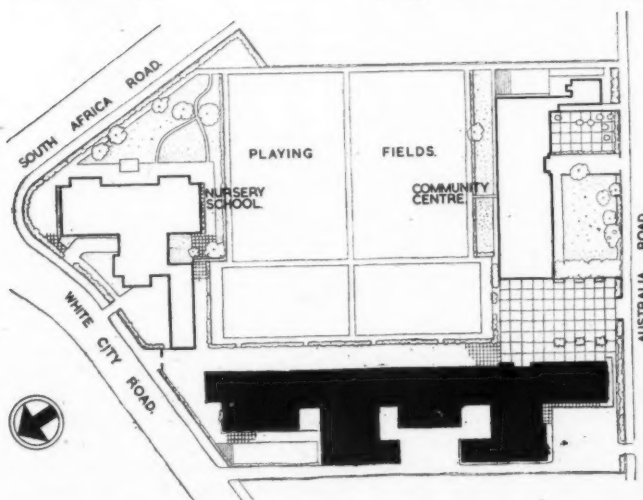
PLAN.—The irregularity of the site in the south-eastern corner lends itself to the more informal type of design and layout of ground required by a nursery school. The site will have access from Australia Road by a roadway along the southern boundary. The community centre is situated on the western boundary as it is nearest the housing estate, and the plan is so designed that the junior's assembly hall on the first floor can be used in conjunction with the centre without entering the school. Particular attention has been paid to the siting of staircases and entrances so that the infants' and juniors' traffic to and from the playground from their respective

departments will not conflict. The schoolkeeper's house has been sited in the south-western corner so that he will have direct supervision over the entrances and community centre and the maximum privacy in his own garden. Sanitary accommodation has been subdivided so that it is readily accessible both from the classrooms and the playground. Direct access to the playground has been arranged from all classrooms in the infants' department.

CONSTRUCTION.—The construction will be steel framed with 11-in. cavity panel walls. The floors and roofs will be precast cellular concrete units. Internal walling will be brick and clinker block. The flat roofs will be insulated with a vermiculite concrete screed and finished with a built-up three-layer bituminous felt roof.

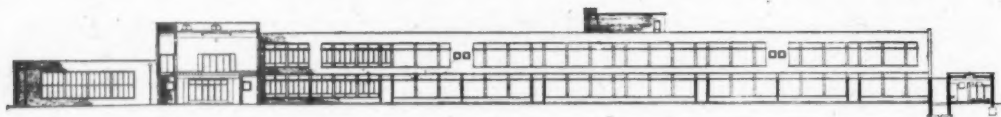
EXTERNAL FINISHES.—The treatment of elevations will be in brickwork with stone dressings to certain windows and the halls on the street frontages. The stanchions supporting the first floor hall will be encased with polished granite. The stanchions on the classroom elevation will be encased in a metal trim. A sculptured stone panel is included in the design of the end wall of the infants' assembly hall.

INTERNAL FINISHES.—Classrooms: Plastic tile flooring, wood skirting, cement glaze dado. Walling: plastered and distempered.

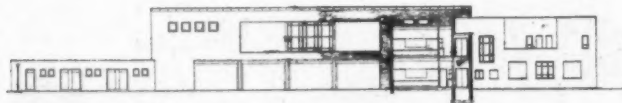


SITE PLAN SHOWING SCHOOL AND COMMUNITY CENTRE
[Primary School, first stage indicated in black]

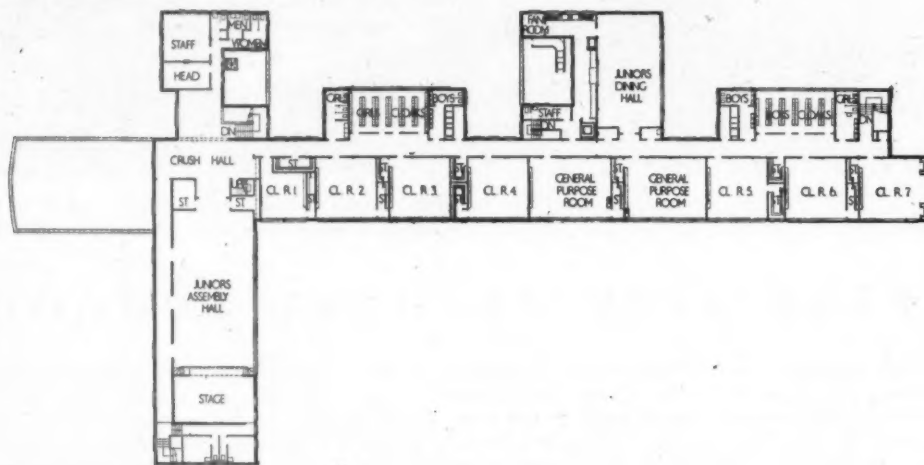
ARCHITECT : ROBERT H. MATTHEW



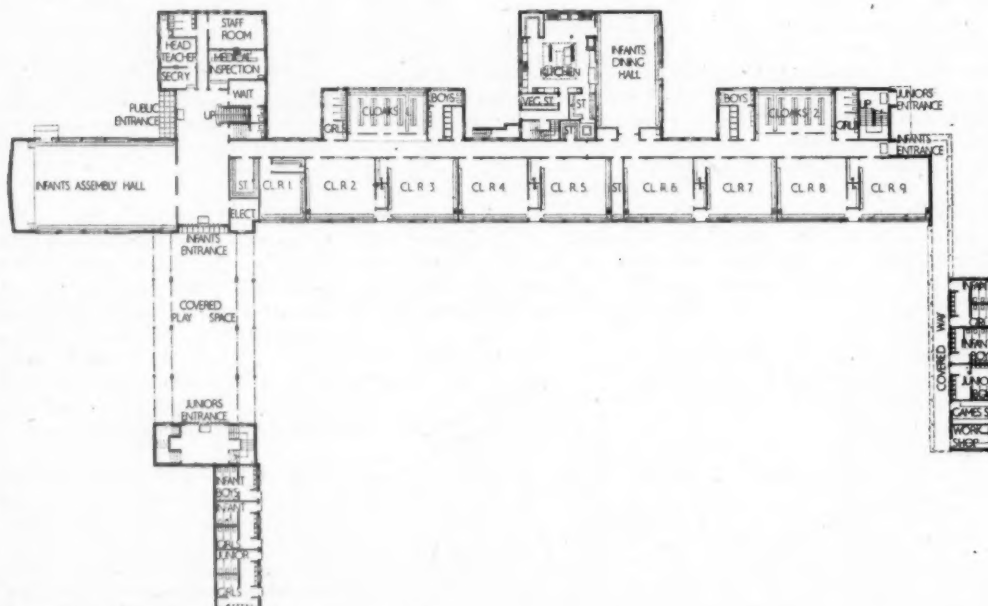
CLASSROOM ELEVATION



CROSS SECTION



FIRST FLOOR PLAN



GROUND FLOOR PLAN

[Scale: 1/4" = 1'0"]

Ceilings will include acoustic tile panels. *Corridors*: plastic tile flooring, wood skirting, cement glaze dado. Walls and ceilings: plastered and distempered. Ceilings will include acoustic tile panels. *Staircases*: main staircase in terrazzo, others in granolithic, cement glaze dado. Walls and ceilings: plastered and dis-

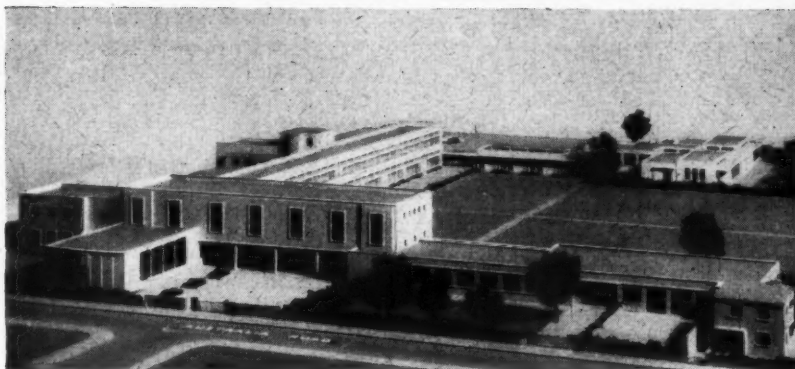
tempered. *Main entrance hall*: terrazzo floor. Walls and ceiling: plastered and distempered. *Assembly halls*: hardwood strip flooring. Walls: plastered and painted. Ceilings: plastered and distempered and to include acoustic tile panels. *Staff rooms*: plastic tile flooring, wood skirting. Walls and ceilings: plastered and

distempered. *Kitchen and servery*: quarry tile flooring and coved skirting, glazed tiled dado. Plastered and painted walls and ceiling. *Dining rooms*: plastic tile flooring, wood skirting, walls plastered and painted. *Cloakrooms, lavatories, drying rooms*: granolithic flooring with coved skirting, high cement glazed dado. Walls

to ceiling plastered and distempered. W.C. compartments will be in metal-faced plywood. Cloak-room hat, coat and shoe racks will be in tubular metal. Special drying rooms are provided to deal with wet clothing.

SERVICES. — Heating by low-pressure hot water radiators supplied from coke-fired boilers.

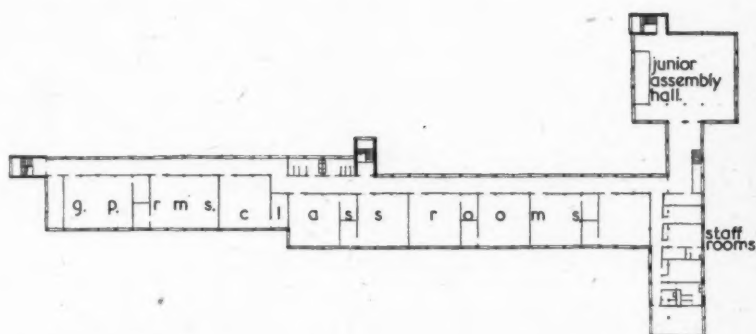
The assistant architects were R. S. Skilling, W. H. Allen, E. J. Blyth, A. J. Christopherson, A. C. Hudson, E. E. Hollamby, E. O. Thomson.



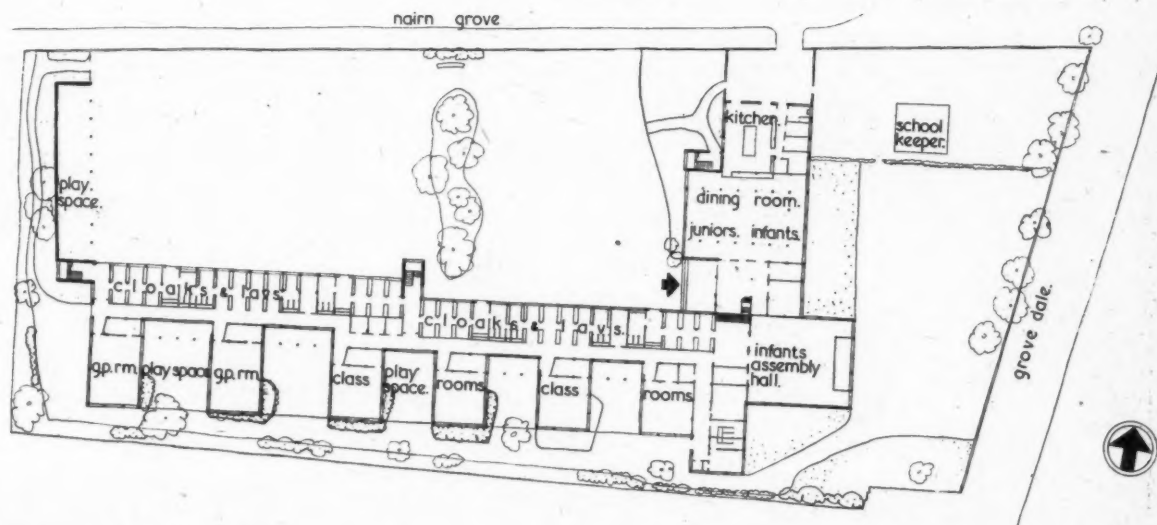
From the west.

5. 1950 SCHOOLS PROGRAMME:

PRIMARY SCHOOL, CAMBERWELL



FIRST FLOOR PLAN



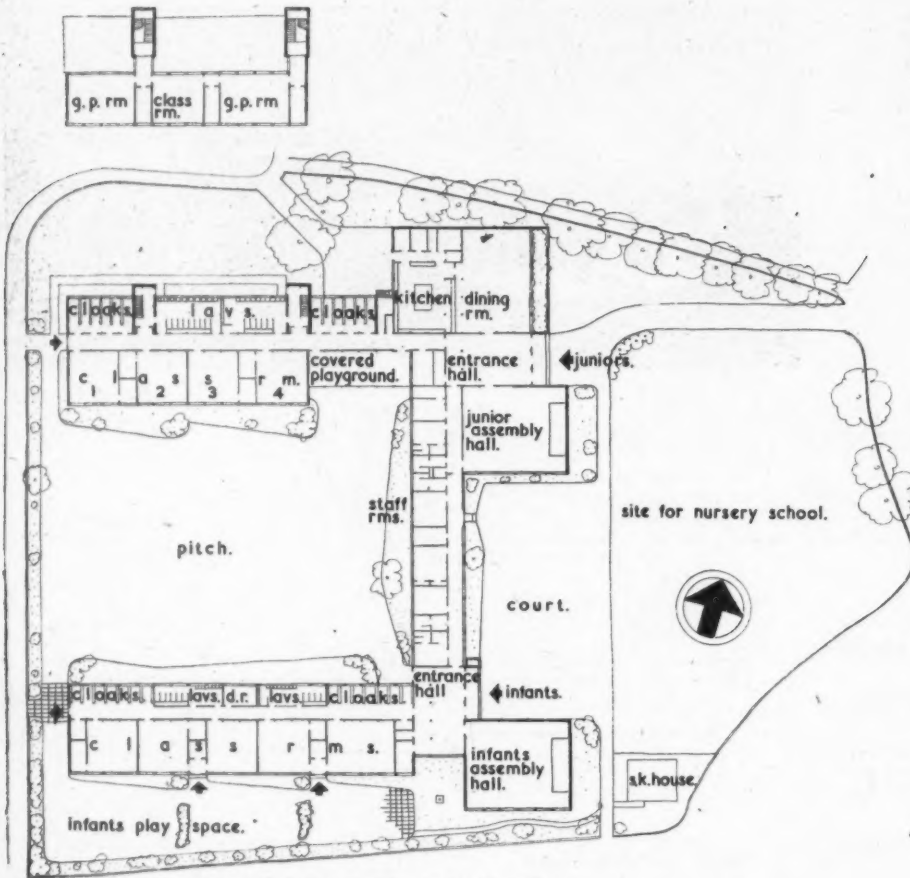
GROUND FLOOR PLAN [Scale: $\frac{1}{8}$ " = 1'0"]

GENERAL. — The five projects illustrated are part of the first group of the 1950 building programme. All are planned on the standard 8 ft. 3 in. grid using a light steel structural frame. It will be noted that the system of a basic grid with standard pre-fabricated structural units has been sufficiently flexible for the

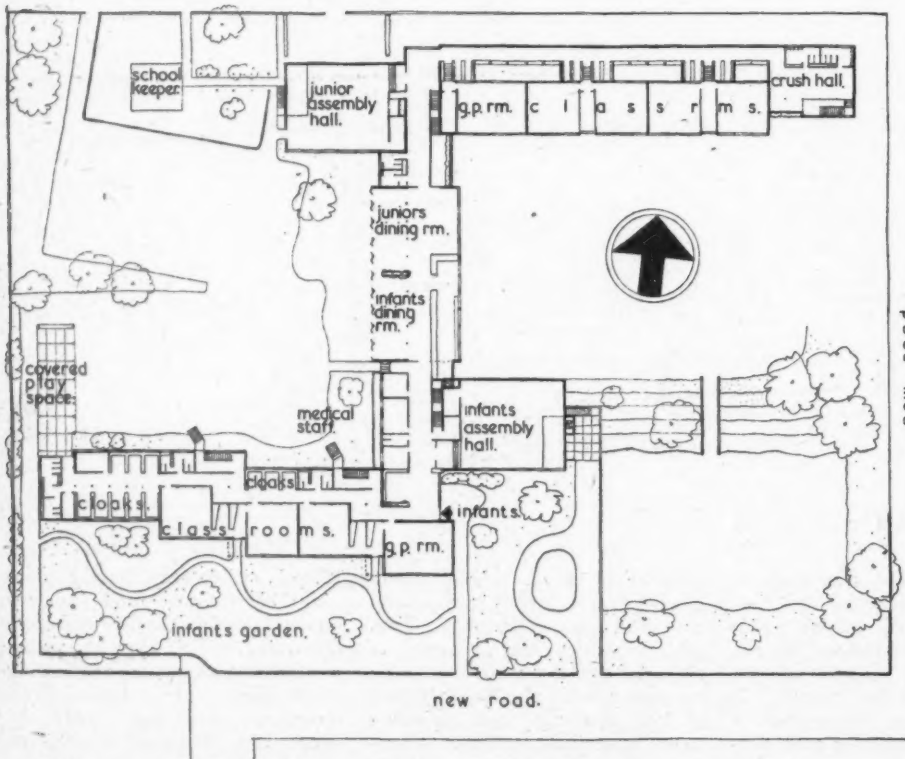
production of a wide variety of plan shapes to suit varying and restricted sites. The 8 ft. 3 in. grid on which the structure of these schools is based is the one recommended in the Wood Report of 1944 and the steel manufacturers have plant available to produce a structural frame of this dimension. In practice it has been

proved satisfactory for the planning of infants' and nursery schools, such as the five examples illustrated. This type of system also has the advantage of allowing the building to be extended in all directions, and can easily be adapted by the use of stanchions, of various lengths, to allow changes in floor and ceiling levels. Also, as

PRIMARY SCHOOL, FULHAM



GROUND AND FIRST FLOOR PLAN [Scale: $\frac{1}{4}$ " = 1'0"]



GROUND FLOOR PLAN [Scale: $\frac{1}{4}$ " = 1'0"]

PRIMARY SCHOOL, WANDS- WORTH

Y
,
M

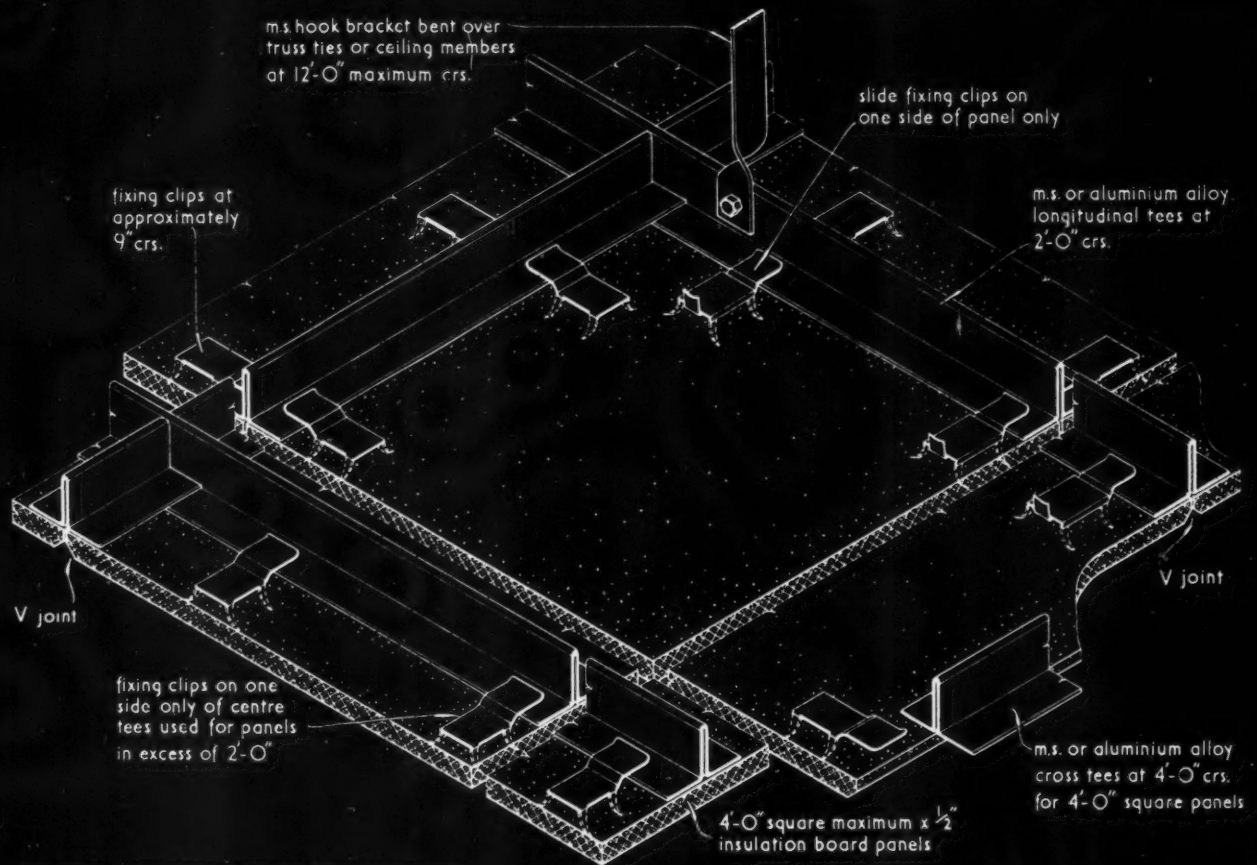
Y
,
H

C

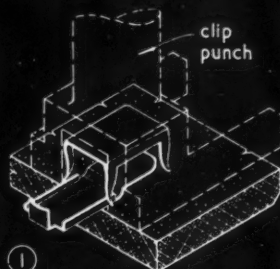
CEILING BUILDING BOARD

22.D11

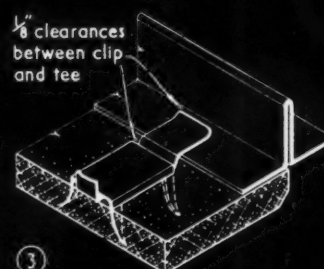
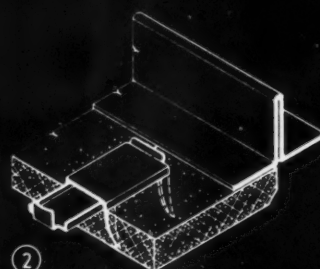
The Architects' Journal Library of Information Sheets 217. Editor: Cotterell Butler, A.R.I.B.A.



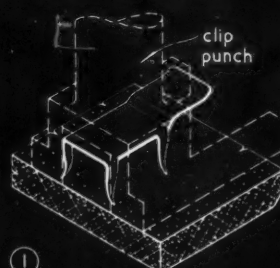
GENERAL ASSEMBLY OF COMPONENT PARTS.



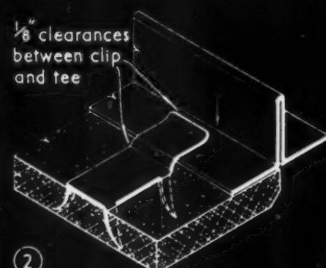
INSERTION OF SLIDE FIXING CLIP



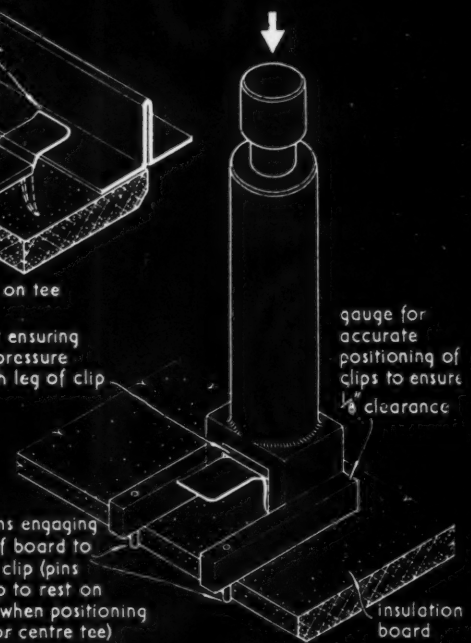
plunger ensuring equal pressure to each leg of clip



INSERTION OF FIXING CLIP



stop pins engaging edge of board to locate clip (pins slide up to rest on board when positioning clips for centre tee)



DETAIL OF CLIP PUNCH.

22.D11 ANDERSON SECRET SYSTEM OF BOARD FIXING FOR SUSPENDED CEILINGS

This Sheet describes a system of board fixing for suspended ceilings in which all fixing members are concealed behind the ceiling face. The suspension and jointing members are of mild steel or aluminium alloy tee section positioned above the building board which is fixed with specially designed pronged clips. The panels are adequately supported, but all that is seen from below is the surface of the boards with V joints.

General System

The system utilises specially designed steel clips, each of which has four pointed legs, with a "set," which, when driven into $\frac{1}{2}$ in. insulation board with a special punch, splay outwards and do not penetrate through the exposed face of the board, but form a secure anchorage. There are two kinds of clip, a fixed type, which is used on three sides of each panel at intervals of not more than 1 ft. and a sliding type, which is used on the fourth side of each panel to facilitate fixing, and is easily operated by hand over the web of the tee. Panels are not usually formed in excess of 4 ft. square. When they are greater than 2 ft. in any one direction the clips are inserted down the centre line, thus securely fixing each board at this point.

Punch and gauge: The clips are inserted with a punch, specially designed for the purpose, which ensures that equal pressure is applied to each leg of the clip, thus obtaining an equal splay. The gauge is attached to the punch, and operates in such a way as to ensure that the leading edges of the clips are free to move with the board, thus obviating buckling from possible expansion when the ceiling is in position.

Compiled from information supplied by :

Anderson Construction Company, Limited.

Address : Clifton House, Euston Road, London,
N.W.1.

Telephone : Euston 7465.

COMPLETE STRUCTURES | PREFABRICATED LIGHT ALLOY

The Architects' Journal Library of Information Sheets 218. Editor: Cotterell Butler, A.R.I.B.A.

25.A5

25.A5

column detail	crs. of braces h	safe concentric loads in tons for effective heights																	
		5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"
Y 4"x4"	1'-0"	2.70	2.57	2.46	2.36	2.25	2.13	2.01	1.91	1.79	1.67	1.56	1.45	1.34	1.23	1.12	1.03	0.95	0.88
Y 7"x4"	1'-0"	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86
Y 10"x4"	1'-0"	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86
Y 4"x4"	1'-3"	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82
Y 7"x4"	1'-3"	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62
Y 10"x4"	1'-5"	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62

LATTICE COLUMNS: PUNCHED EXTRUSION.

column detail	crs. of braces h	safe concentric loads in tons for effective heights																	
		5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"
$\begin{array}{c} Y \\ \square \\ 4" \times 4" \\ \square \end{array}$	1'-0"	4.91	4.69	4.50	4.27	4.07	3.87	3.66	3.45	3.25	3.04	2.83	2.63	2.44	2.23	2.05	1.88	1.73	1.61
$\begin{array}{c} Y \\ \square \\ 7" \times 4" \\ \square \end{array}$		7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	17'-0"	18'-0"	19'-0"	20'-0"	21'-0"
$\begin{array}{c} Y \\ \square \\ 7" \times 4" \\ \square \end{array}$	1'-0"	5.20	5.20	5.20	5.11	5.01	4.91	4.80	4.57	4.36	4.13	3.92	3.69	3.48	3.26	3.04	2.83	2.61	2.40
$\begin{array}{c} Y \\ \square \\ 10" \times 4" \\ \square \end{array}$	1'-0"	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.17	5.05	4.91	4.74	4.60	4.46	4.29	4.15	4.02	3.84
$\begin{array}{c} Y \\ \square \\ 10" \times 4" \\ \square \end{array}$	1'-3"	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84
$\begin{array}{c} Y \\ \square \\ 10" \times 4" \\ \square \end{array}$	1'-6"	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40

LATTICE COLUMNS: UNPUNCHED EXTRUSION.

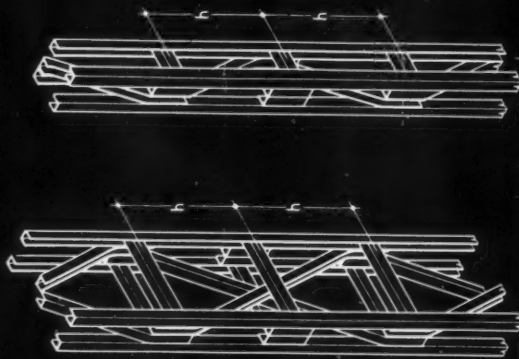
column type	safe concentric loads in tons for heights between braces h																		
	1'-0"	1'-3"	1'-6"	1'-9"	2'-0"	2'-3"	2'-6"	2'-9"	3'-0"	3'-3"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	
A	0.72	0.70	0.65	0.61	0.56	0.51	0.46	0.41	0.36	0.26	0.20	0.16	0.13						
B	1.43	1.43	1.37	1.28	1.19	1.10	1.01	0.92	0.83	0.74	0.50	0.39	0.32	0.26	0.22				
C	1.43	1.43	1.36	1.27	1.17	1.08	0.98	0.89	0.79	0.61	0.46	0.37	0.30	0.25	0.20				
D	2.15	2.15	2.04	1.90	1.77	1.63	1.49	1.35	1.22	0.94	0.72	0.57	0.46	0.38	0.32	0.27	0.26		

SIMPLE COLUMNS: PUNCHED EXTRUSION.

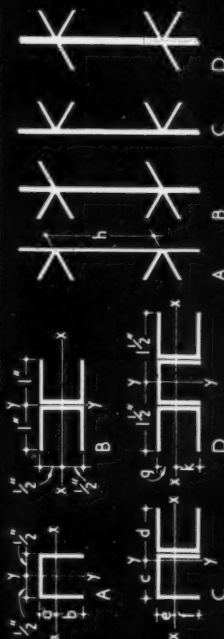
column type	safe concentric loads in tons for heights between braces h																				
	1'-0"	1'-3"	1'-6"	1'-9"	2'-0"	2'-3"	2'-6"	2'-9"	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"
A	1.30	1.21	1.10	0.99	0.88	0.78	0.68	0.56	0.47	0.40	0.35	0.30	0.27	0.21	0.17						
B	2.60	2.60	2.50	2.34	2.18	2.02	1.85	1.69	1.52	1.36	1.20	1.04	0.92	0.72	0.59	0.49	0.41	0.35	0.30	0.26	0.23
C	2.60	2.57	2.40	2.22	2.04	1.85	1.68	1.49	1.31	1.14	0.98	0.85	0.75	0.59	0.48	0.40	0.33	0.28	0.24		
D	3.90	3.90	3.70	3.40	3.14	2.88	2.62	2.36	2.10	1.84	1.59	1.39	1.22	0.96	0.78	0.64	0.54	0.46	0.40	0.35	0.30

SIMPLE COLUMNS: UNPUNCHED EXTRUSION.

KEYLOCK SYSTEM OF CONSTRUCTION: LATTICE AND SIMPLE COLUMNS: SAFE CONCENTRIC LOADS



7½" 4" and 10" 4" columns
4" x 4" column



COLUMN TYPES AND SPACING OF BRACES.

size (in.)	a	b	c	d
punched	0.375	0.625	0.938	1.062
unpunched	0.365	0.635	0.933	1.067
size (in.)	e	f	g	k
punched	0.438	0.562	0.459	0.541
unpunched	0.433	0.567	0.455	0.545

CENTRES OF GRAVITY.

25.A5 • KEYLOCK • SYSTEM OF CONSTRUCTION : LATTICE AND SIMPLE COLUMNS : SAFE CONCENTRIC LOADS AND PROPERTIES

This Sheet is the fifth of a group describing the Keylock system of connecting standard structural elements to form a flexible range of building components.

The tables on the face of this Sheet give the safe concentric loads for columns built up from the standard elements.

The tables below give the properties of the column sections.

The safe loads and properties for beams will be given in a subsequent Sheet in this series.

Lattice Columns : Punched and Unpunched Extrusions

The upper two tables on the face of this Sheet give the loads for effective heights of lattice columns. It has been left to the designer to assess the end conditions in any particular case. The following are suggested values which may be used:—

(a) Column rigidly fixed at both ends against rotation and displacement.

Effective length = 0.75 actual length.

(b) Column rigidly fixed against displacement at both ends and against rotation at one end.

Effective length = 0.875 actual length.

(c) Column fixed against displacement at both ends.

Effective length = actual length.

Lattice Columns : Sectional Properties

Punched column size	Weight per ft. (lb.)	Effective area (sq. in.)	Moments of inertia		Radii of gyration		Moduli of section	
			Axis $x-x$	Axis $y-y$	Axis $x-x$	Axis $y-y$	Axis $x-x$	Axis $y-y$
4 in. \times 4 in.	1.60	0.5712	1.579	1.377	1.661	1.550	0.789	0.685
7 in. \times 4 in.	2.00	0.5712	5.649	1.377	3.14	1.550	1.615	0.685
10 in. \times 4 in. ; $h = 1$ ft. 0 in.	2.20	0.5712	12.271	1.377	4.63	1.550	2.454	0.685
$h = 1$ ft. 3 in.	2.05							
$h = 1$ ft. 6 in.	1.95							
Unpunched column size	Weight per ft. (lb.)	Effective area (sq. in.)	Moments of inertia		Radii of gyration		Moduli of section	
			Axis $x-x$	Axis $y-y$	Axis $x-x$	Axis $y-y$	Axis $x-x$	Axis $y-y$
4 in. \times 4 in.	1.80	1.04	2.87	2.5	1.66	1.55	1.435	1.25
7 in. \times 4 in.	2.20	1.04	10.3	2.5	3.14	1.55	2.95	1.25
10 in. \times 4 in. ; $h = 1$ ft. 0 in.	2.40	1.04	22.35	2.5	4.64	1.55	4.47	1.25
$h = 1$ ft. 3 in.	2.25							
$h = 1$ ft. 6 in.	2.15							

Simple Columns : Sectional Properties

Punched type	Weight per ft. (lb.)	Effective area (sq. in.)	Moments of inertia		Radii of gyration		Moduli of section	
			Axis $x-x$	Axis $y-y$	Axis $x-x$	Axis $y-y$	Axis $x-x$	Axis $y-y$
A	0.255	0.1428	0.018	0.022	0.354	0.391	0.029	0.044
B	0.510	0.2856	0.044	0.076	0.391	0.515	0.087	0.076
C	0.510	0.2856	0.041	0.094	0.378	0.574	0.073	0.089
D	0.765	0.4284	0.063	0.276	0.384	0.803	0.117	0.184
Unpunched type	Weight per ft. (lb.)	Effective area (sq. in.)	Moments of inertia		Radii of gyration		Moduli of section	
			Axis $x-x$	Axis $y-y$	Axis $x-x$	Axis $y-y$	Axis $x-x$	Axis $y-y$
A	0.281	0.2598	0.023	0.040	0.30	0.394	0.037	0.081
B	0.562	0.5196	0.081	0.116	0.394	0.278	0.161	0.116
C	0.562	0.5196	0.066	0.161	0.356	0.557	0.116	0.150
D	0.843	0.7794	0.107	0.475	0.371	0.781	0.197	0.317

Values to the left of the heavy/full line are governed by a limiting stress of 11,200 lb./sq. in. for local buckling at the free edge of the channel. Values to the left of the heavy dotted line are obtained from the critical stress in the individual channel sections.

Values to the right of this line are obtained from a critical stress for the column as a whole.

Simple Columns : Punched and Unpunched Extrusions

The lower two tables on the face of this Sheet give the loads for simple columns which vary with the height between bracings. The lower right-hand table gives the centres of gravity of these columns.

The columns will, with few exceptions, be braced several times in their height and consequently the section between braces approaches a fixed ended column. End sections will also be rigidly fixed to foundations or beams.

An effective height equal to $\frac{3}{4}h$ has therefore been used to compile these tables.

Values to the left of the heavy full line are governed by a limiting stress of 11,200 lb./sq. in. for local buckling at the free edge of the channel. Values between the heavy lines have been obtained from a short column formula. Values to the right of the heavy broken lines have been obtained from a long column formula.

Properties of the sections given are in inches and inch units.

Compiled from information supplied by :

Packaged Buildings (Robert Building Inventions Limited).

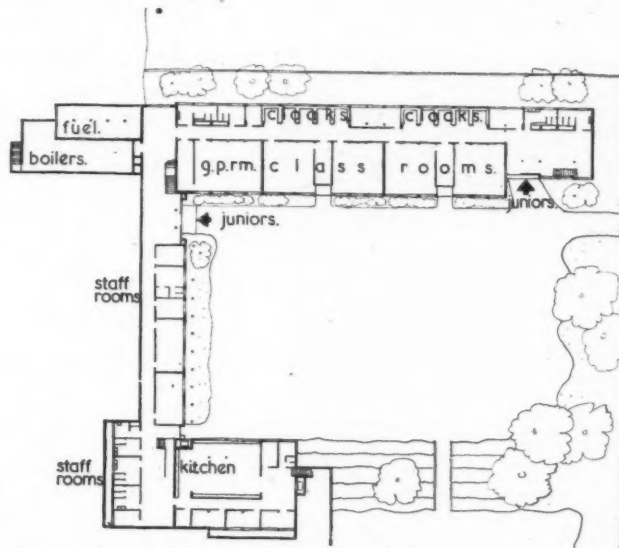
Head Office : Indio House, Bovey Tracey, South Devon

Telephone : Bovey Tracey 2261

Registered Office : 63-65, Piccadilly, W.1

Telephone : Regent 6580

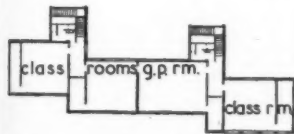
PRIMARY SCHOOL, WANDSWORTH



LOWER GROUND FLOOR PLAN
[Scale: $\frac{1}{4}$ " = 1'0"]



ELEVATION OF CLASSROOM BLOCK

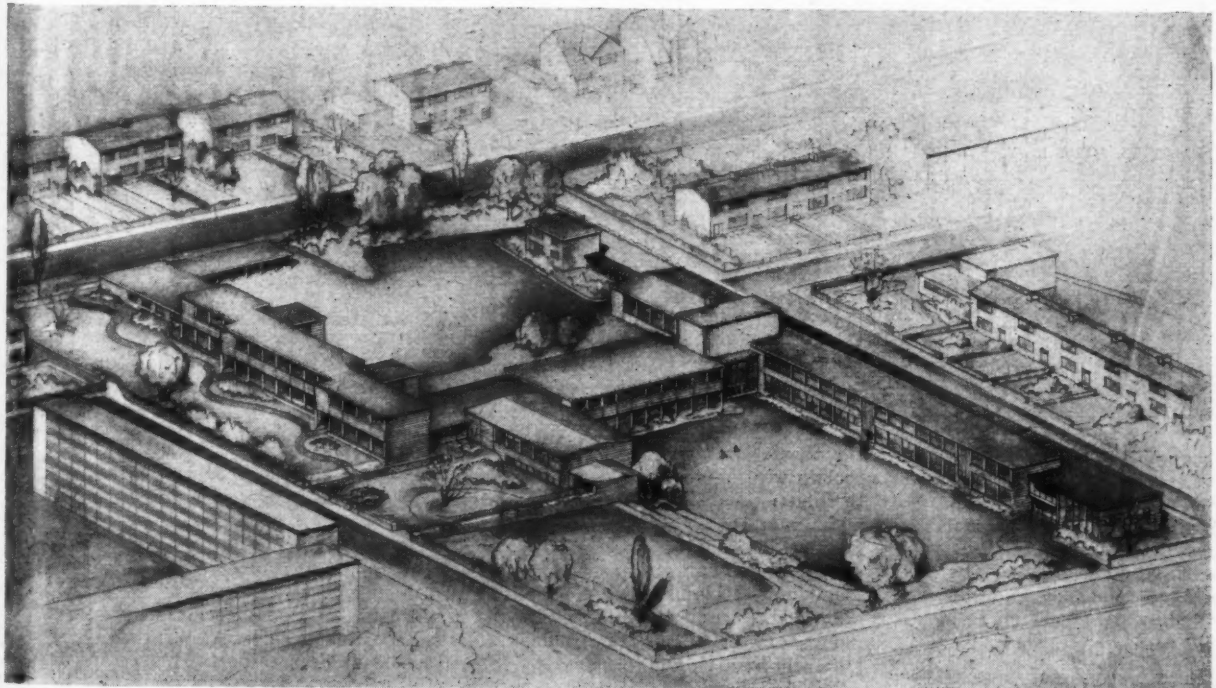


FIRST FLOOR PLAN



CROSS SECTION

Perspective of the proposed primary school at Wandsworth.



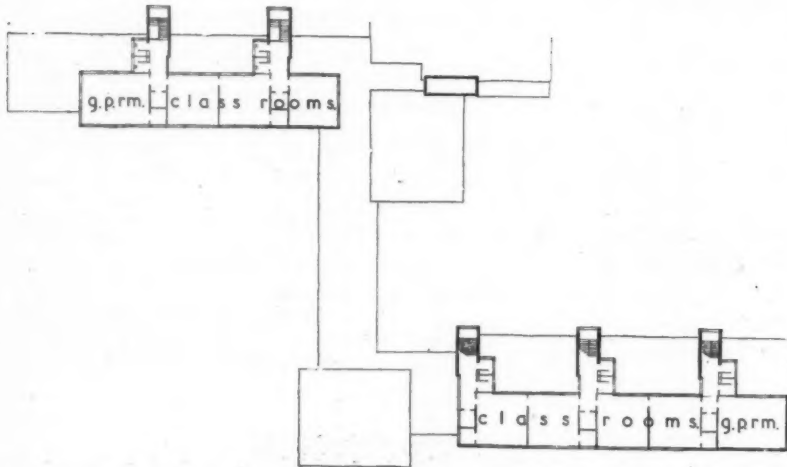
ARCHITECT : ROBERT H. MATTHEW

the walls and cladding are independent of the frame, the materials used could be varied. The structural system, normally used only for single-storey buildings, has also proved to be satisfactory for two-storey work. In-situ brickwork is restricted to staircase blocks and linking units. The plans themselves show various methods of classroom planning, including the normal closed single-banked corridor, the open single-banked corridor, the "elbow" plan and two-floor staircase access. It is possible with the standard grid to produce satisfactory plans for almost any normal site, and the system has the approval of the Ministry of Education.

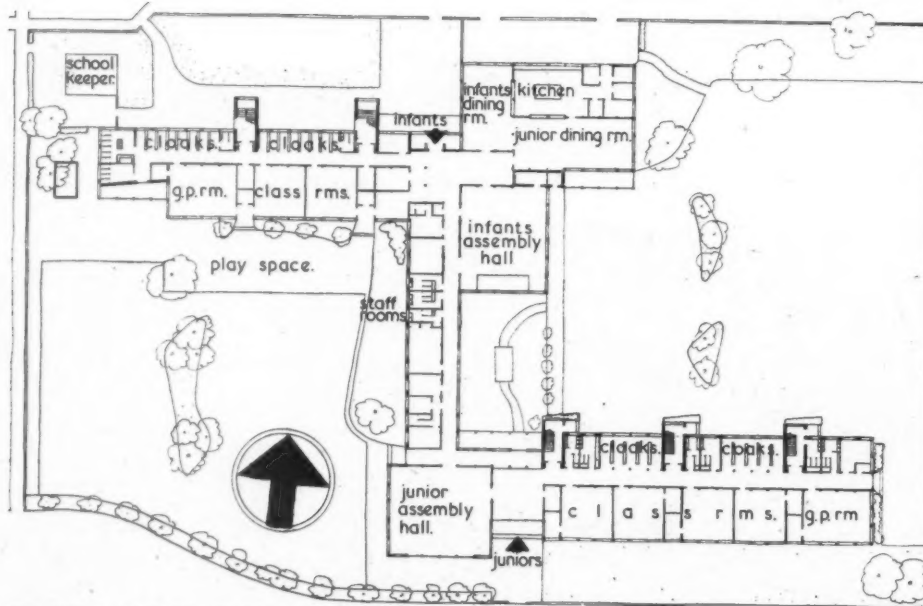
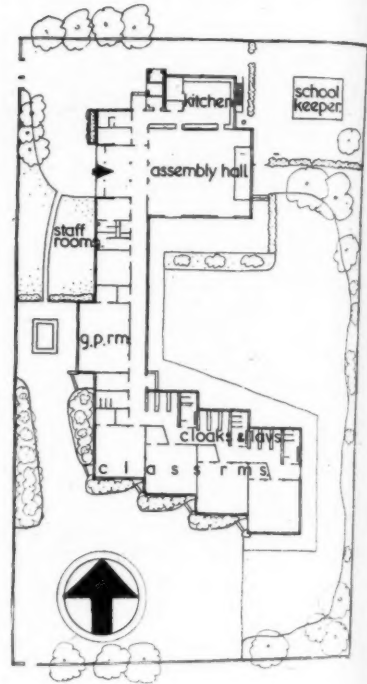
CONSTRUCTION.—In selecting materials there are several important considerations: suitability of the material and ease of erection, availability of the material and cost. The light steel structural frame, external cladding, precast

PRIMARY SCHOOL, GREENWICH

PRIMARY SCHOOL, ELTHAM



FIRST FLOOR PLAN



GROUND FLOOR PLAN [Scale: $\frac{1}{4}$ "=1'0"]

floor and roof units, metal doors and windows have been developed from the original standard units to meet the Council's requirements for these schools. The external concrete slabs are supported by steel members and the internal wall of light-weight concrete blocks is fixed separately to the frame.

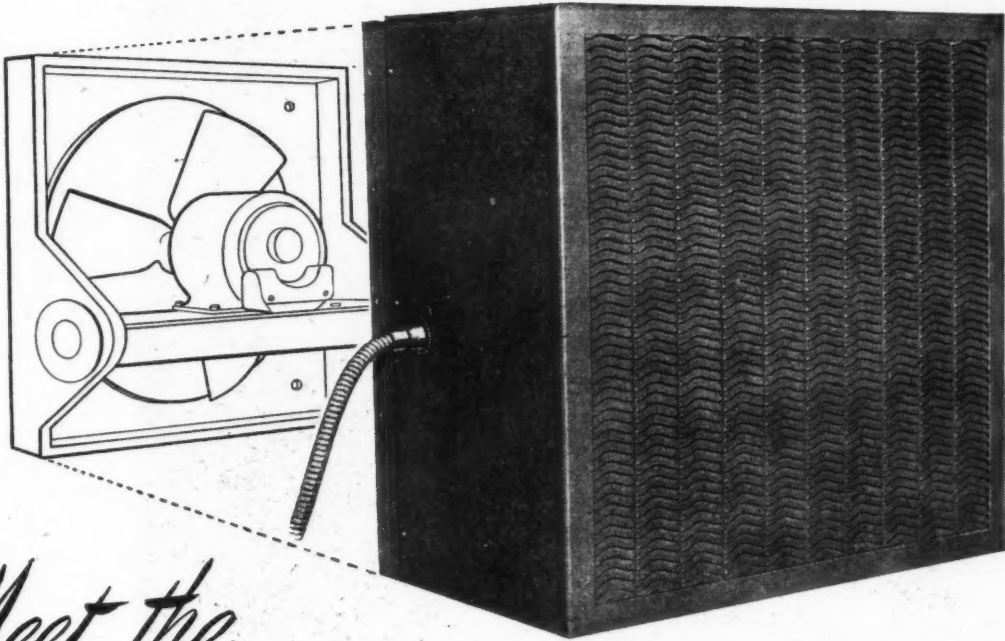
FINISHES.—Roofs, 2-in. foamed

slag insulation under built-up felt roofing with V-jointed fibre board to soffits. Walls, plaster finished with paint and glazed cement dados. Internal casing to stanchions, aluminium trim. Classroom and assembly hall floors, granwood, corridors and staff rooms, plastic tiles. Classroom walls will have cork pin-up panels, with aluminium cover strips.

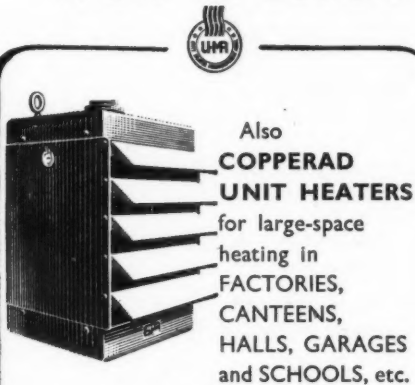
SERVICES.—Heating by floor coils or warm air units under windows.

The assistant architects for the school building programme are A. W. Stringer, D. R. Stark, J. M. Kidall, S. J. Follett, C. Wooster, Miss M. Claridge, A. W. Strutt. Consultant architect: J. Howe.

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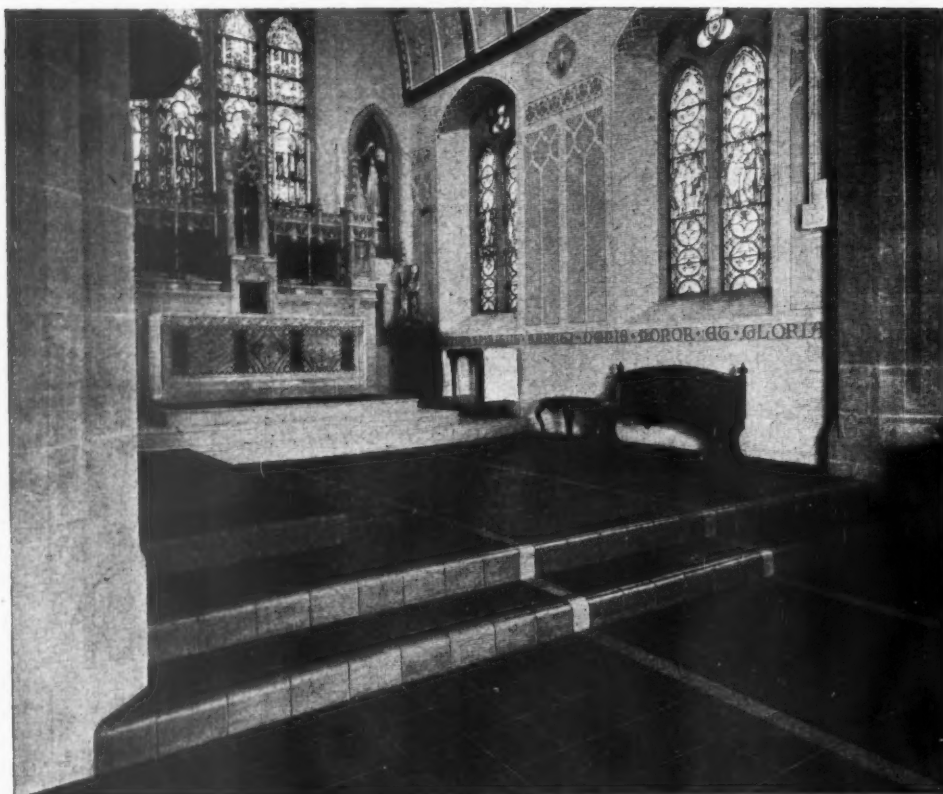
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and St. Joseph,
Prescot,
Lancashire.*

*Architect :
W. Ellis, Esq., J.P.,
F.R.I.B.A.*

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2.101 planning: general

MICRO-CLIMATE AND PLANNING

The Influence of Micro-Climate on Planning. W. E. Graham. (Planning Outlook, Vol. 1, No. 2, 1949. pp. 40-52.)

Illustrated extracts from a town planning diploma thesis, University of Durham. Attempt to evaluate relation of micro-climatology to town and country planning.

After giving a short historical outline of the subject the author defines and discusses various factors influencing micro-climate such as topography, prevailing winds, areas of water, and soil conditions. He then investigates the effect of micro-climate on built-up areas and *vice versa*, and stresses the need to recognize micro-climatology as a complete subject for planning surveys and not merely to deal with some aspects of it as is customary today.

Of the accompanying diagrams two are of particular interest in regard to new town planning. The first shows an assessment of site values based on prevailing micro-climatic factors, while the second provides a diagrammatic layout plan for a new town incorporating the principles of micro-climatology as discussed in the article.

3.20 planning: regional and national

TAY VALLEY REPORT

The Tay Valley Plan, being a Physical, Social and Economic Survey and Plan for the Future Development of East Central Scotland. G. E. Payne. (East Central Scotland Joint Planning Committee, Dundee. 1949. Not priced.)

Most comprehensive document consisting of two volumes of duplicated typescript. Illustrated with tables, charts and some diagrams. No maps.

This extensive regional survey and plan for the valley of the river Tay is intended to form a background for urban and rural reconstruction, physically, socially and economically, which should take place over the next thirty to fifty years if the region's trends towards "rural decadence and urban concentration" are to be reversed. The proposed programme of reconstruction has been so designed that it will fit in with the separate development plans to be worked out by the area's various planning authorities under the Town and Country Planning Act, 1947.

The survey, divided into ten detailed sections, covers the historical background, geological and climatic conditions, landscape characteristics, population structure and trends, the industrial and housing background, rural land use pattern, sociological conditions, accessibility, and lastly public utility services.

Historical Background

The Tay Valley region, as investigated by the author, has Dundee and Perth as its main centres, and covers the counties of Angus, most of Perthshire, the Mearns of Kincardineshire and Northern Fife, with a total acreage of 2,500,000. Geographically the area is linked together by the Firth and upper reaches of the river Tay, and by the long fertile valley of Strathmore. It is enclosed by highland areas to the north, south and west, and by the sea to the east. With the development of communications, towns, trade and industry, this natural region grew eventually into an economic unit. The historical survey traces this development from prehistoric times, drawing attention to the growth of the linen industry by the second half of the eighteenth century, the work being carried on largely in rural districts with the burghs serving as markets. While this industry grew, it became gradually concentrated more in the towns and less in the rural districts until, with the advent of the steam engine, factories became centralized, depending more and more on imported raw materials. This left the rural industry isolated and forced it to turn to food production. With the rapid population increase during the early part of the industrial period, a marked drift of rural surplus population to the towns set in, continued over a long period and eventually seriously threatened the whole basis of rural life. During the later part of the industrial period Dundee increased its size by five times between 1820 and 1900. It became the chief port of the region and attained great wealth and importance with the development of the jute industry. As a one-industry town, however, the later decline and fluctuations of the jute industry had serious effects on the town's economy. While the larger towns absorbed most of the tremendous population increase, the population of the smaller towns and rural areas remained static. The original rural "cottage" industry disappeared entirely, and cultivated land was split up into large tenant farms. Although there was an exceptionally prosperous agricultural period between 1840 and 1880, the import of cheap food began to have its effect at the end of the nineteenth century. Other aspects covered in the historical survey refer to architectural and cultural developments, and include a note on the typical tenement buildings of the bigger Scottish towns and their grim appearance. Although

these buildings, through their height and compactness, have largely prevented an urban sprawl into the surrounding countryside, they represent a serious problem in that having long outlived their usefulness as fit dwelling places they are still mostly structurally sound.

In presenting this detailed historical survey the author stresses the point that it provides the preliminary outlines on which a plan for future development should be based.

Population Tendencies

The following chapter is devoted to a study of the region's population characteristics and trends. The 1931 population figure is 377,751, and it is shown that the main problem consists of the drift of population from rural areas and the smaller burghs to the larger urban centres and away from the region altogether, which has produced an unbalanced age and sex composition.

Industrial Background

In the industrial survey attention is drawn to the fact that practically three-quarters of the region's industry is concentrated on Dundee, the chief jute manufacturing centre in the British Isles. Distribution of industry in the other areas is also fully covered, the investigations leading to the conclusion that the major industrial problem consists of the need for a greater variety of light industries and their better dispersal throughout the region.

Housing Survey

There are many references to housing difficulties facing industrialists by the absence of sufficient living accommodation for workers within reasonable travelling distance of the factories. Other housing aspects investigated include overcrowding and the distribution of families according to number of rooms occupied, and it is obvious that here the chief problem consists of the preponderance of dwellings too small in relation to family size. The actual housing survey covers the region's towns and villages in detail and describes the state of the dwellings under three different categories of standards.

Rural Land Use Pattern

Much space is devoted to the region's rural land use pattern. The problems facing agriculture result mainly from changes due to the introduction of new methods and increased mechanization, and from lack of sufficient labour, adequate housing, and public and social services.

Sociological Conditions

The social survey covers every aspect of living. It applies Sir Patrick Geddes' principle of the correct balance and integration of work, folk and place, to the study of the social needs of the region, and deals with the tendencies of young people leaving school in regard to employment possibilities; with the influence of the urban centres; with the adequacy of communications in rural areas; the extent of the provision of social facilities and public utility services; and finally gives a comparative analysis of all the various factors which influence the social conditions of the countryside in order to indicate those for which there is the greatest demand. This survey is based on a division of the region into ten groups of rural centres, each of which possesses a fairly distinctive social and physical unity. There are three specific groups of these centres, major ones such as Dundee and Perth, the smaller local service centres and thirdly, a still smaller type concerning the larger villages in the region.

Other Survey Aspects

The last two chapters of the survey deal with communications, with water and

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power supply and their trends of development, and with sewerage.

Regional Planning Proposals: Objectives

The second volume of the report is entirely devoted to the plan for the region. It consists of two major parts, the first setting out the main objectives and principles of the proposals, the second giving conclusions and specific recommendations. There are nine tabulated appendices containing much interesting statistical data relating to the survey part of the report.

The main objective of a successful plan for the region must be to reverse the drift of population from the rural areas. Although this is primarily an economic problem it is also closely linked with social and physical considerations. A long-term plan for the redistribution of population should be started as soon as possible. The absorption of additional industries into the region should be encouraged, but it will be necessary to ensure that such industrialization will not attract further workers from the land and will not take high quality agricultural land permanently out of production. The introduction of such industries into small towns and rural areas should take due account of local sources of employment, and it is suggested that some towns or villages should have a speedy increase in size from 10,000 to 25,000 population with accompanying services.

The pattern of settlement to be adopted is divided into three categories. Grade I, the regional centre, should provide major services such as first class shopping facilities; higher educational, cultural and recreational activities, major hospitals and health services; large-scale manufacturing industries, business and marketing facilities; and major hotels. Grade II, the district centre, with a population from 10,000 to 12,000, should serve the surrounding rural area in regard to shopping and entertainment. It should be equipped with one or more secondary schools, a medium-sized hospital, a welfare and maternity centre, agricultural and cattle markets, general medium industries and business, some cinemas, and hotels. Grade III is divided into two categories comprising the urban village centre, with a population in general up to 2,000 and an occasional increase up to 3,000, and the glen centre of smaller size. The urban village centre should have primary educational facilities, a village hall and small lending library, a health centre, small shops and small industries. Glen centres should be developed with a special function in relation to the dispersed population of the highland areas, with basic services similar to those of the urban village centre and with industries confined to those associated with forestry and agriculture. Diagrammatic layouts of the three grades of settlement are provided.

The author then goes on to discuss the principles of the future composition of the towns and the principles which should govern the location of general industry with particular reference to the accessibility of industrial sites, the availability of labour, and the establishment of trading estates. The location of rural industry is defined separately indicating industrial qualifications for rural settlements, possible and desirable industries for rural areas, and listing those industries which have been provisionally selected for rural dispersal.

Other planning principles outlined include those for agriculture, road transport, recreational facilities, housing and public services. They are followed by specific planning proposals for the region based on the objectives detailed in the foregoing section.

The absence of maps and of an index from the present edition of the survey and plan is an obstacle to the study of the work as

a whole, and it is to be hoped that a final edition in book form of this most valuable report will eventually be made available.

15.64 materials: applied finishes and treatments PAINTING ON PLASTER

Painting New Plaster and Cement. Ministry of Works Advisory leaflet No. 1, 1949. (Distribution through Building Trade organisations and Technical Colleges.)

Chief points leading to failures and recommendations for avoidance or cure. Brief and simple. Intended for small builders, foremen and craftsmen.

There has been much talk of the failure to convey to the building industry quickly the results of research, and various committees have advocated that the National Building Studies should be supplemented by simpler practical publications for the craftsmen and small builders. This leaflet is the first of a series planned by the MOW as an answer to this demand.

The information included appears to be about what is wanted, but the make up and type used for two large tables does not provide an attractive or easily read page. As the success of these leaflets will depend so much upon their having an immediate appeal to encourage reading, this point seems important.

This leaflet is being distributed free, through builders' organizations, and some others to follow will also be free. It is said that payment will be asked for some later issues. Architects might well help the good work by mentioning these leaflets to craftsmen and others during their site visits.

23.117 heating and ventilation HOUSE HEATING

House Heating: Some Thoughts on Standards and Methods. S. F. Newcombe. (J. Royal Inst. British Architects. Aug., 1949. 2s. 6d.)

Article pointing out importance of providing satisfactory house heating at cost householder can afford, and suggesting means.

The author of this article quotes the statement in "Warm Air House Heating" in the RIBA Journal, June, 1949, that convection heating plus topping up, to Egerton Standards, is likely to be too dear for the working class tenant. He states that he is sure that it is so, and shows means of providing the necessary comfort at a more reasonable cost. In this connection, he properly points out the wide variations of opinion as to what "comfort" is. He points out the saving of 30 per cent. achieved by "alternative" heating in place of "whole house," a figure which would be improved upon when the occupancy of the rooms was less than the eight hours per day standardized for test purposes. He points out also, how widely variable are temperatures in this country, both over a short period of time and a limited area. In this respect, he emphasizes the rapid heat gain through windows in periods of sunshine, and the equally rapid heat loss through them at night, unless this is limited by careful curtaining.

From these factors, he adduces the need for heating of a more flexible kind than is usually provided. He recommends also, in the interests of economy, that only those rooms should be heated which are at the time actually occupied; and to achieve comfort in these conditions, he postulates the need for the following:—

- (1) Dry, damp-proof inner linings to all internal surfaces of outer walls and roof.
- (2) Some heat storage: e.g. in lagged hot water cylinders and internal walls.
- (3) Closely controllable heating appliances, correctly sited and suited to the size of each room.

He particularly emphasizes the importance of low thermal capacity, resistance to vapour penetration, and reflective value of the internal lining. Such a lining will become rapidly warmed from a radiant heat source, and comfort conditions be brought about within a few minutes of switching on the appliance. The possibility of making use of reflective surfaces, such as screens, to concentrate the heat on the occupants is observed.

Probably the chief argument against such a system is that the principal occupant of the house—the housewife—has to move from room to room, and might find the alterations of warm and cold zones trying; but there is so much in its favour, by way of economy, that a full scale trial would seem well worthwhile.

25.74 water supply and sanitation GUTTERS AND PIPES

Asbestos Cement Rainwater Pipes, Gutters and Fittings. BS 569:1949. (British Standards Institution. 6s.)

Revised standard includes dimensions for half round and ogee gutters and a range of larger types, including valley and box gutters.

26.58 services and equipment: miscellaneous POLYTHENE-INSULATED CABLES

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QUESTIONS AND ANSWERS

3006 COST OF EXTRA WORK

Q My client ordered work over and above the original estimate without asking for an additional estimate. He has now been charged an exorbitant amount for this extra work. To what extent is my client legally liable to pay the full amount where a deadlock exists in which the builder refused to admit he has overcharged?

A Am I within my rights, as an architect, to say what I think the work should have cost and advise my client to pay this and no more?

A Where work is ordered without an agreement as to the cost then the amount charged by the builder must be reasonable, having regard to the character of the work. The architect is entitled to express his opinion as to what the reasonable cost should be, and, in the event of disagreement, the matter could be referred to arbitration.

Corrections

In our issue of October 13, in which we published particulars of a school at Romney Avenue, Bristol, designed by the City Architect to the Corporation of Bristol, Mr. J. Nelson Meredith, we referred to Richard Sheppard & Partners as consultant architects. It has been pointed out that the firm are consultant architects to the Bristol Aeroplane Company in the design of the school units, but that they do not share in the design of this school.

In the same issue we wrongly implied that Mr. Cyril H. Walker had collaborated in the design of a block of flats, known as Crofts House, at Dinmont Estate, Teale Street, Shoreditch. It was, in fact, designed by Mr. G. E. Bright for the LCC, for whom Mr. Walker is the Director of Housing and Valuer.

Buildings Illustrated

Horn Park Primary School (pages 460-462). Architects: Messrs. R. H. Matthew, Dr. J. L. Martin, R. Wilson, G. W. Home, K. J. Campbell. Assistant Architects: Messrs. T. Grierson, G. F. Horsfall, T. J. R. Winn, W. Martin, P. W. Dumpress. General Contractors: Thomas Tierney & Co. Ltd. Sub-Contractors: Excavation, foundations, D.P.C.'s asphalt, plumbing, water supply, Thomas Tierney & Co.; concrete blocks, Orlit Ltd.; bricks, Sussex & Dorking Brick Co., Lingfield Brick Co., Sevenoaks Brick Co., Dunbrik Ltd.; art stone, Wotton Bros. and Brooks Ltd.; structural steel, LCC and Arthur Foster Ltd.; roofing felt, William Briggs & Sons,

Ltd.; glass, W. N. Froy & Sons, Ltd.; patent flooring, Veitch Co. Ltd.; gas fixtures, gas fittings, The South Eastern Gas Board; electric wiring, electric light fixtures, Thorpe & Thorpe Ltd.; sanitary fittings, B. Finch & Co. Ltd.; door furniture, N. F. Ramsey & Co. Ltd.; casements, Crittall Manufacturing Co. Ltd. and The Pennycook Patent Glazing and Engineering Co. Ltd.; metalwork and bells, G. H. W. Cashmore & Co.; plaster, Aerochem Ltd.; tiling, Orlit Ltd. and the Aroanum Terrazzo & Stone Co. Ltd.; school fittings, LCC; clocks Smiths English Clock Ltd.; cold glaze cement, Palorit Ltd.; paint for exterior and interior use, Silexine Ltd.

Redriff Primary School, Rotherhithe Street (pages 463-464). Architects: Messrs. R. H. Matthew, Dr. J. L. Martin, R. Wilson, G. W. Home, K. J. Campbell. Assistant Architects: Messrs. A. W. Stringer, W. J. Smith, J. G. Cairns. General Contractors: William Harbrow Ltd. Sub-Contractors: Bricks, Uxbridge Flint Brick Co. Ltd.; structural steel, Astons Construction Co. Ltd.; roofing felt, Everseal Products Ltd.; partitions, Gyproc Products Ltd.; patent flooring, Semtex Ltd.; central heating, Norris Warming Ltd.; gas fitting, Jones Martin Ltd.; boilers, Ideal Boilers and Radiators Ltd.; electric wiring, Johnson Pearce Ltd.; ventilation, Ozonair Ltd.; plumbing, Ellis (Kensington) Ltd.; sanitary fittings, Dent & Hellyer Ltd.; door furniture, W. N. Froy & Sons Ltd.; casements and pressed metal, window furniture, Henry Hope & Sons Ltd.; rolling shutters, Shutter Contractors Ltd.; plaster, J. H. Jenner & Co. Ltd.; joinery, William Harbrow Ltd.; tiling, Vitretext (England) Ltd.; school fittings, LCC Supplies Department; cloakroom fittings, Clark Hunt & Co.; clocks, Smiths English Clocks, Ltd.

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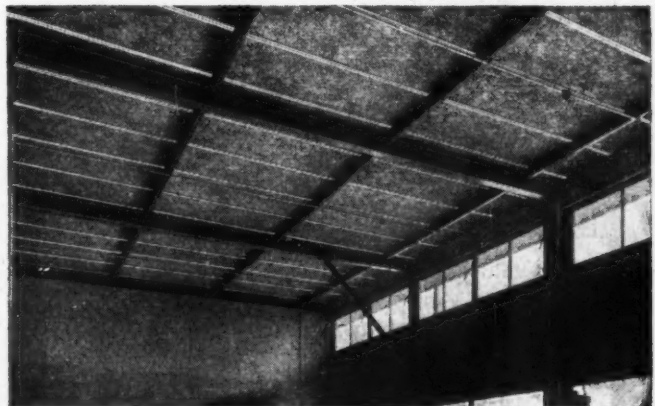
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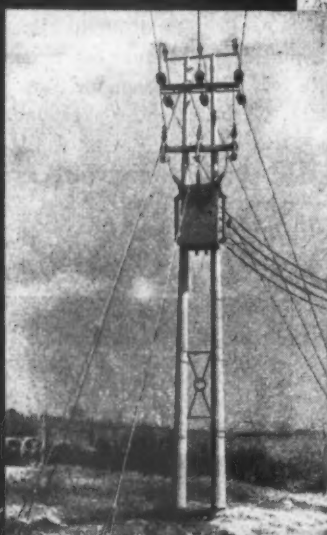


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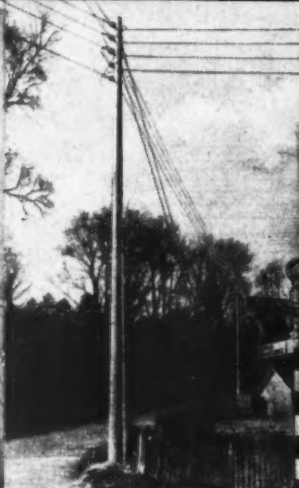
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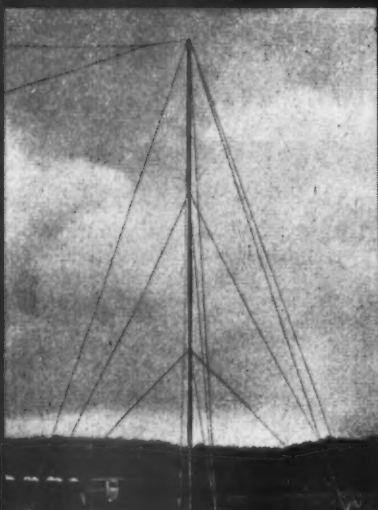
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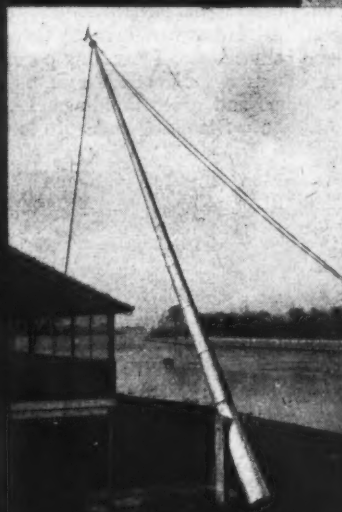
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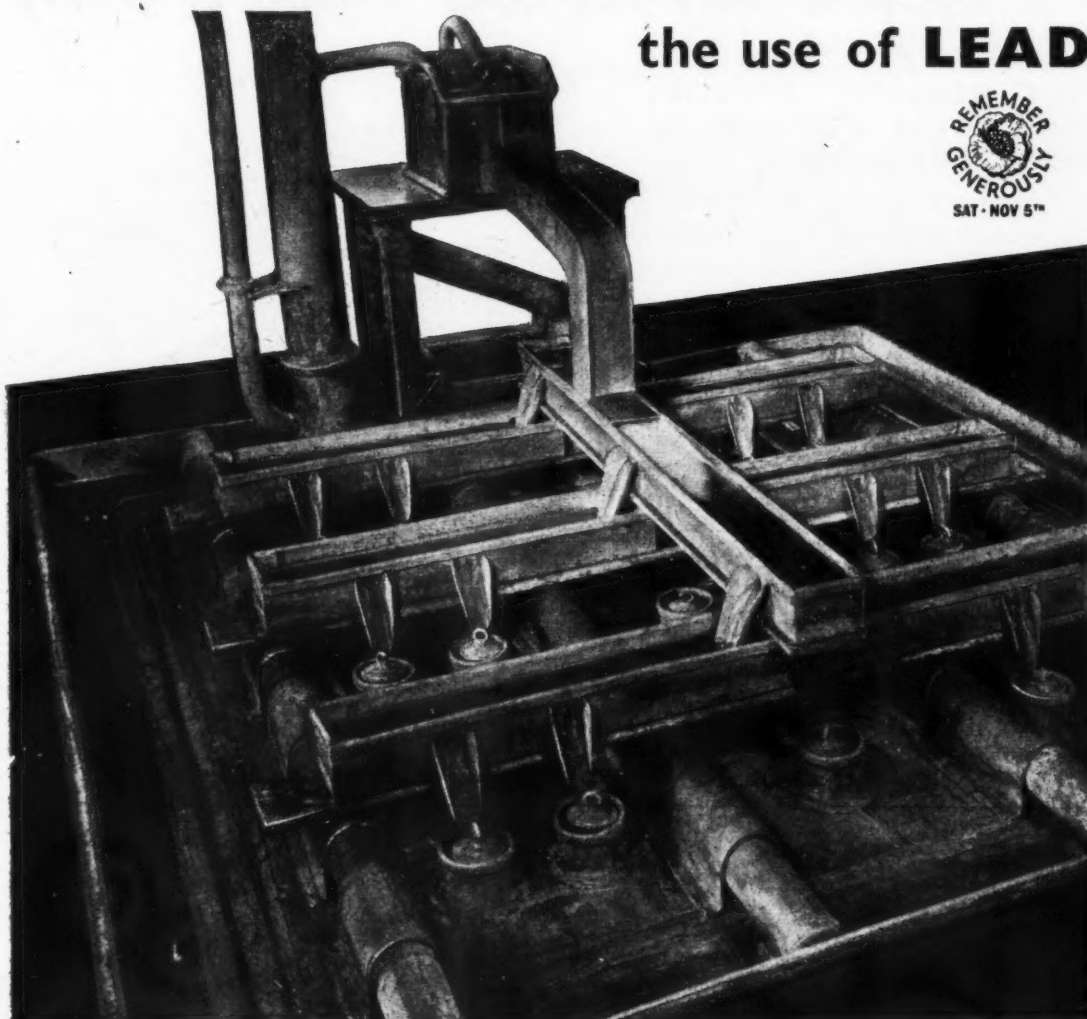
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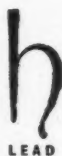


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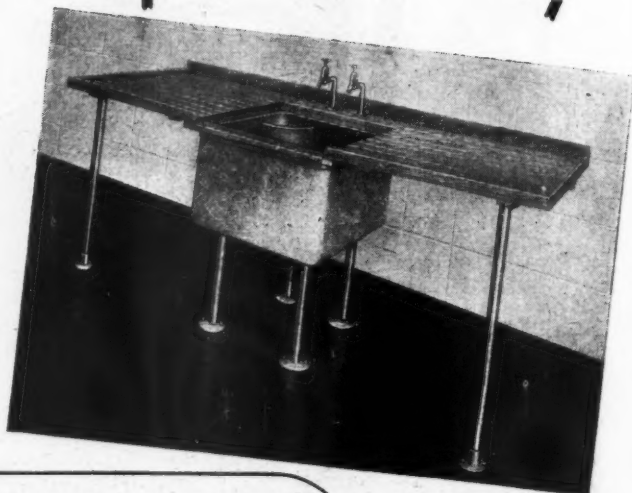
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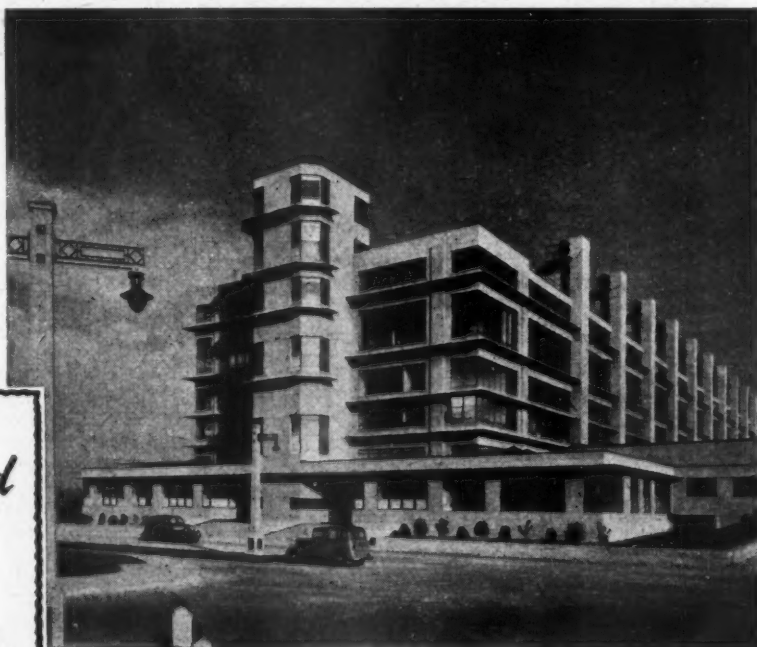
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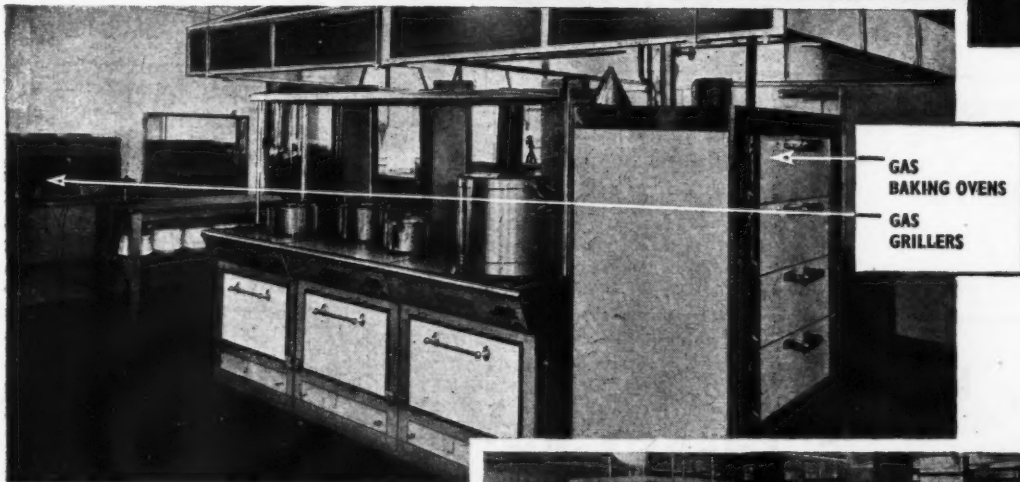
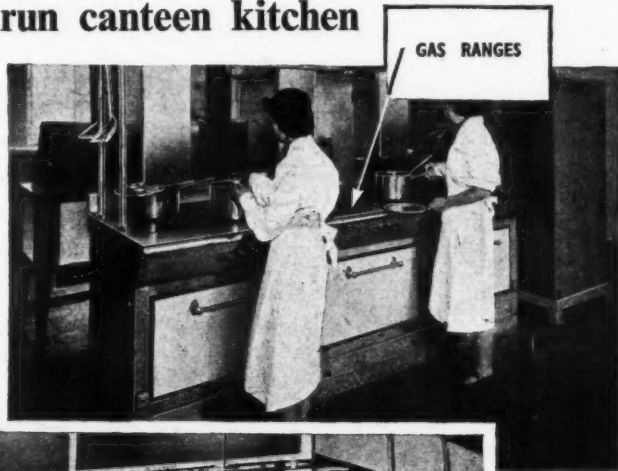
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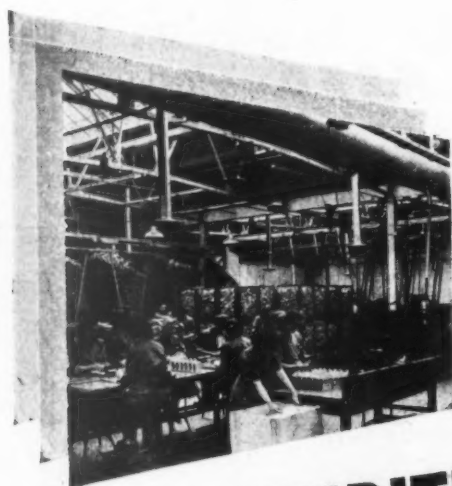


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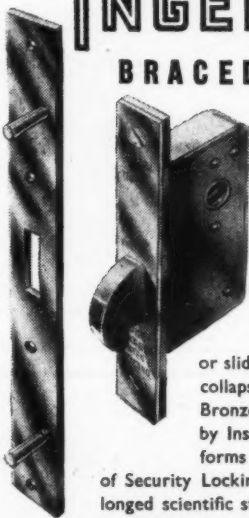
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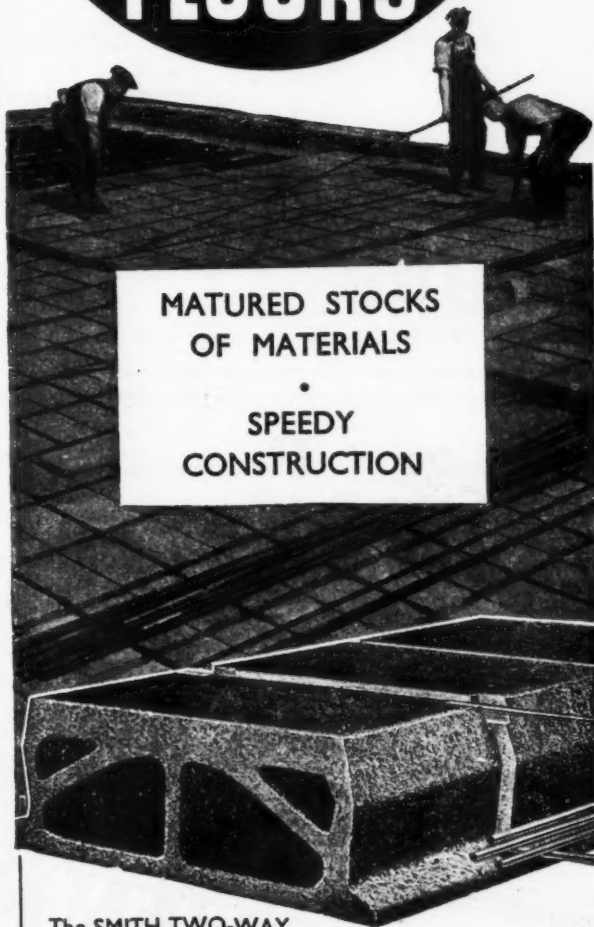
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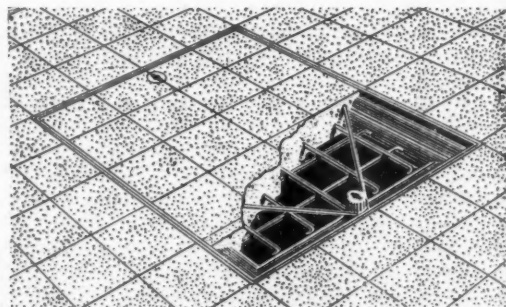
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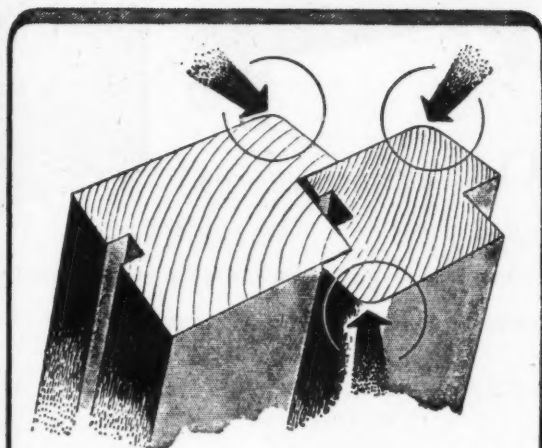


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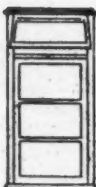


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IP46
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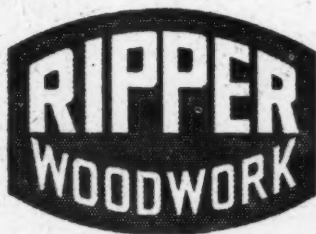
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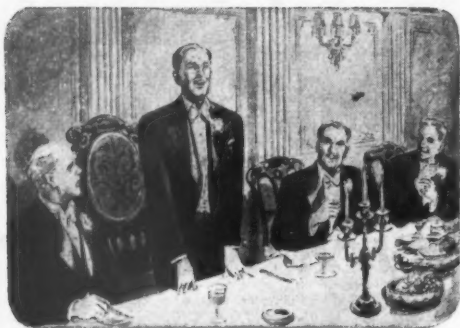
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Duresco paints



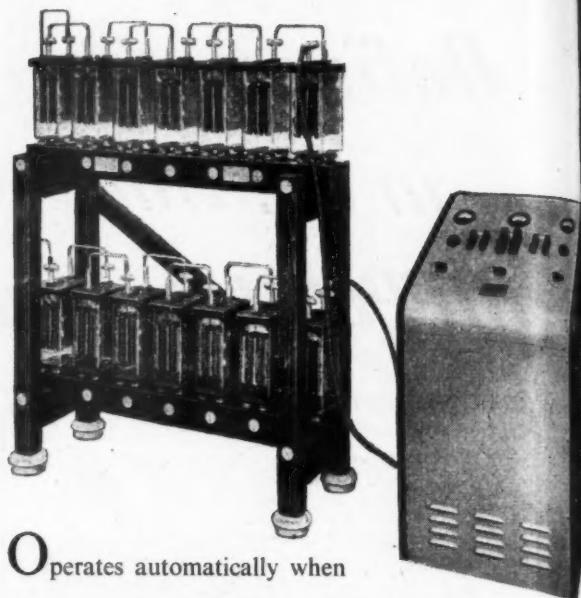
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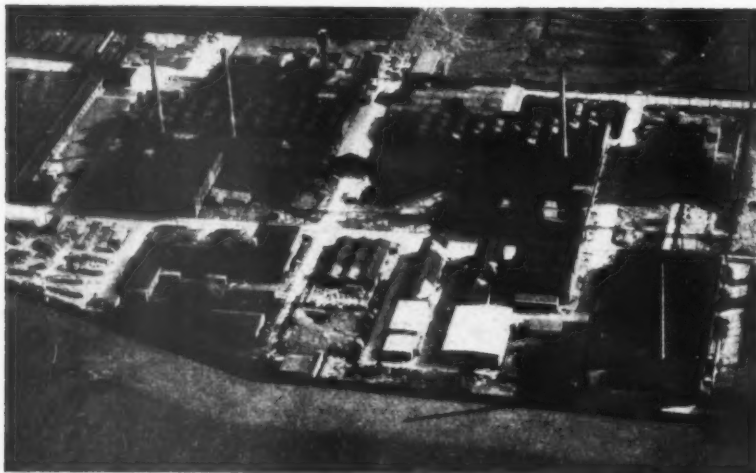
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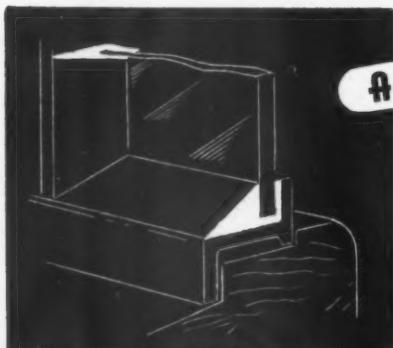
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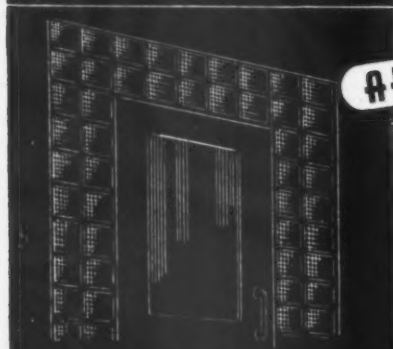


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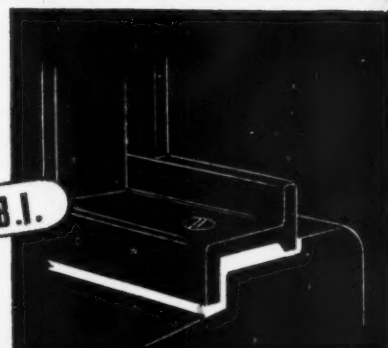
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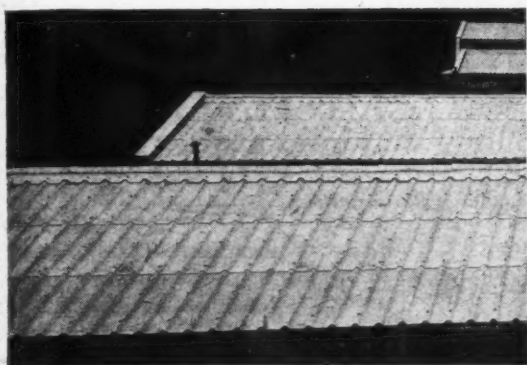
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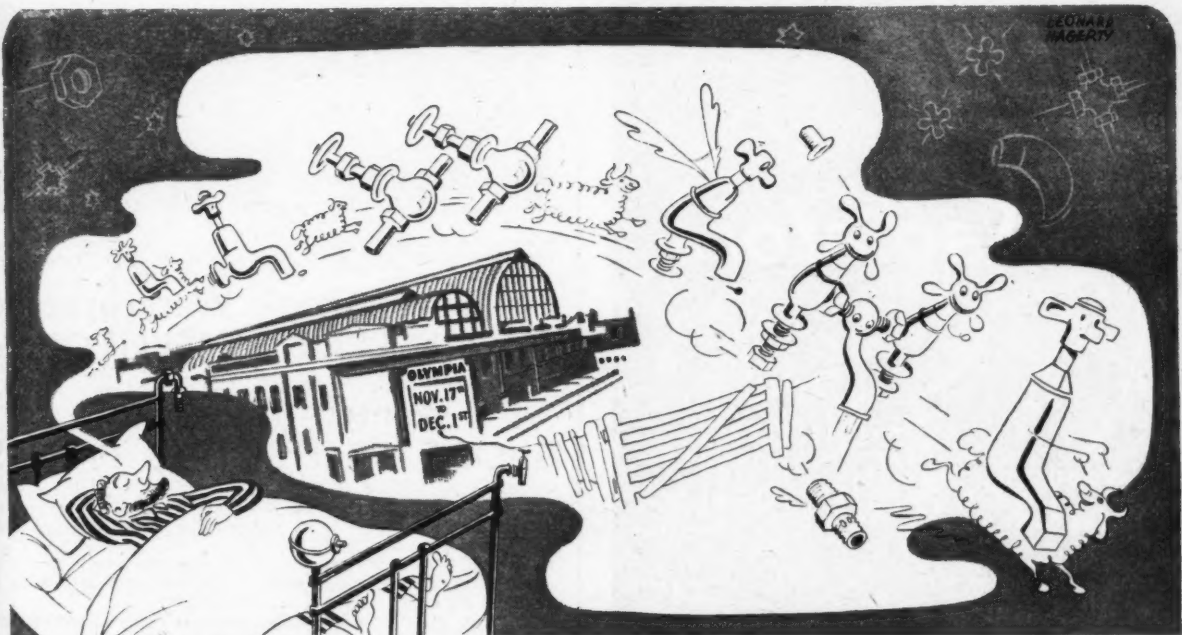


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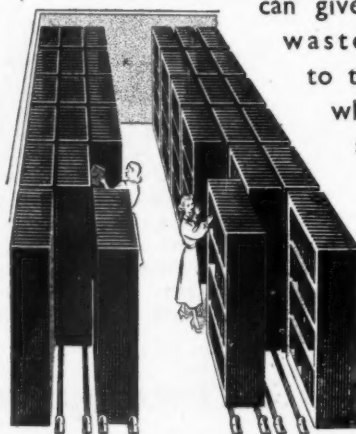
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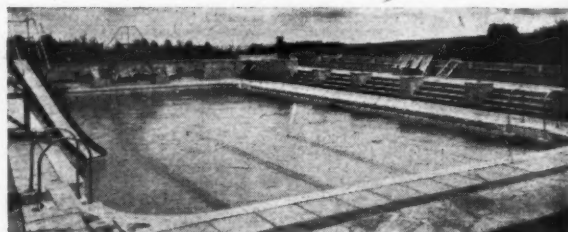


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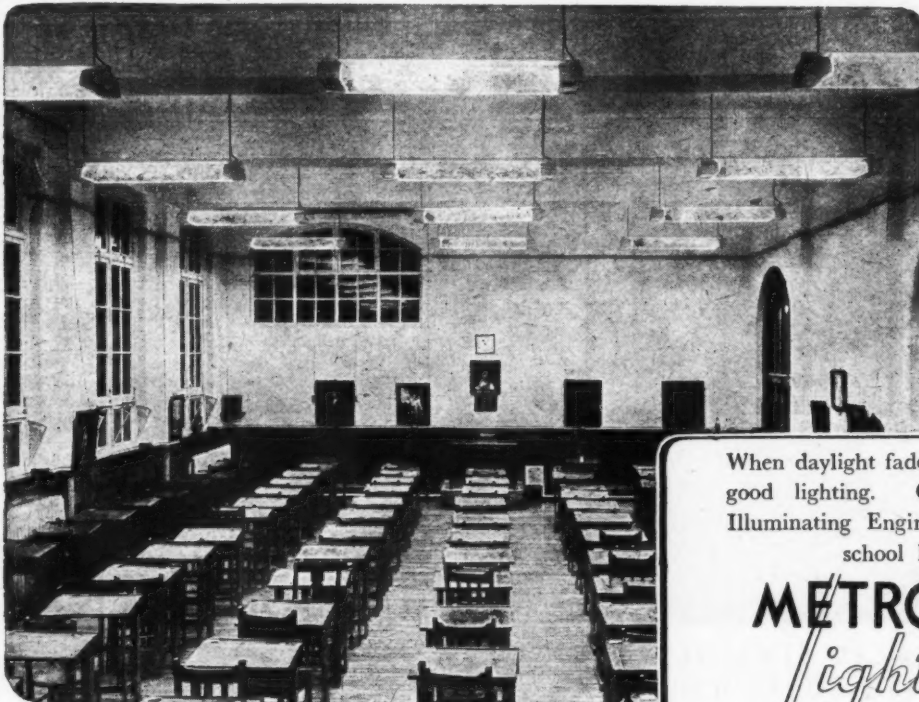
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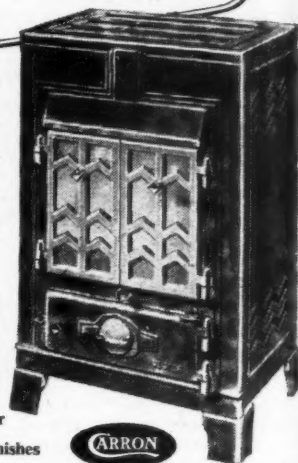
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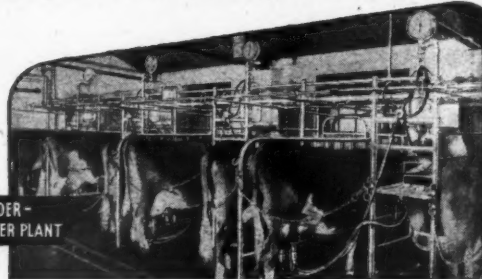
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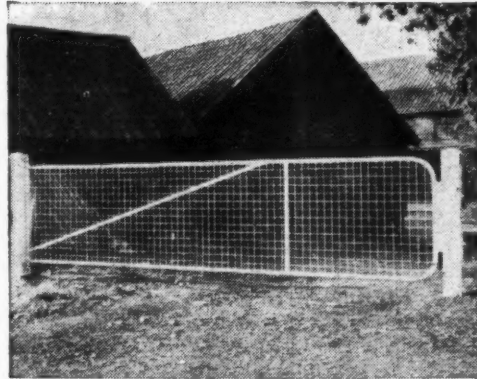
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Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

Replies to Box Numbers should be addressed to "The Architects' Journal," at the address given above.

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THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. ADDRESS: EMPLOYMENT REGISTER, WARREN PARK, WHITELEAF. Tel.: Uplands 0935. 991

LONDON COUNTY COUNCIL.

Applications are invited for unestablished positions of (1) ARCHITECT, Grade III (salaries up to £700 a year) and (2) ARCHITECTURAL ASSISTANTS (salaries up to £580 a year), in the Housing and Valuation Department. Commencing salaries in either grade will be determined according to qualifications and experience. Engagement will be subject to the Local Government Superannuation Acts, and successful candidates will be eligible for consideration for appointment to the permanent staff on the occurrence of vacancies.

Successful candidates will be required to undertake the design, layout and preparation of working drawings for housing schemes (cottages and multi-storey flats), and will be employed in the Housing Architect's Division. Preference will be given to candidates holding a recognized professional qualification.

Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.W.1 (stamped addressed envelope required, and quote Ref. G.H.3.). Canvassing disqualifies. (2269) 1046

MINISTRY OF WORKS.

There are vacancies in the Chief Architect's Division for ARCHITECTURAL ASSISTANTS, with recognized training and fair experience. Successful candidates will be employed in London and elsewhere on a wide variety of Public Buildings, including Atomic Energy and other Research Establishments, Telephone Exchanges, and Housing. Similar vacancies also exist for ASSISTANTS, with specialized knowledge and experience in stonemasonry, particularly in detailing and jointing of ashlar and carved stonework.

Salary: Architectural Assistants, £300-£325 per annum; Leading Architectural Assistants, £500-£625, plus overtime. Starting pay will be assessed according to age, qualifications and experience. These rates are for London; a deduction is made in the Provinces.

Although there are not established posts, some of them have long-term possibilities, and competitions are held periodically to fill established vacancies.

Apply in writing, stating age, nationality, full details of experience, and locality preferred, to Chief Architect, W.C.10/T. Ministry of Works, Abell House, London, S.W.1. 2065

THE CO-OPERATIVE WHOLESALE SOCIETY, LTD.

invite applications for the following appointments on the staff of the Manchester Architect's Department—

THREE ASSISTANT ARCHITECTS. Salary £510-£625 per annum. Applicants are required to have a sound knowledge of building construction and be able to produce working drawings and details from sketch plans. Experience in design and planning of modern industrial buildings, or shopping emporia and retail shops, will be considered an advantage.

ONE ASSISTANT STRUCTURAL ENGINEER. Salary, £610-£710 per annum. Applicants are required to have general experience in designing and detailing of structural steel, reinforced concrete and foundation works, and be able to work with a minimum of supervision.

The above appointments are permanent and offer prospects of up-grading to competent Assistants. Successful candidates will be required to undergo a medical examination for entry into compulsory superannuation scheme.

Applications, stating age, experience, and qualifications, to be addressed to the Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester. 2404

Applications are invited for filling vacancies in the South-Eastern Regional Office at Tunbridge Wells.

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ARCHITECTURAL AND ENGINEERING DRAUGHTSMAN, having had a full period of recognized training and experience in the preparation of drawings for good class building work. The work is varied and not confined to standard schemes. Starting pay will be assessed according to age, qualifications and experience within a scale rising to £495 per annum.

Applications, stating age, present and previous appointments, training qualifications, etc., should be sent to the Assistant Regional Director (Administration), Ministry of Works, Government Buildings, Hawkenbury, Tunbridge Wells, Kent. 2485

BOROUGH OF WILLESDEN. APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant, on the Permanent Staff of the Borough Engineer and Surveyor's Department.

The salary attaching to the post will be Administrative, Professional and Technical, Grade VI, of the National Whitley Council's Scale for the London area, namely £595 per annum, rising by two annual increments of £20 per annum and one of £25 per annum to £660 per annum, plus London weighting of £30 per annum.

Candidates must be Associates of the Royal Institute of British Architects or hold an equivalent qualification, and preferably have general knowledge and experience of architectural work in the service of a local authority.

The appointment will be terminable by one month's notice on either side, is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications, giving age, experience, etc., accompanied by copies of not more than three testimonials, should be addressed to the undersigned, endorsed "Architectural Assistant," not later than 10 a.m. on Monday, 7th November, 1949. It will be necessary for the successful candidate to provide his own housing accommodation as the Council is not in a position to assist.

Canvassing, directly or indirectly, will be deemed a disqualification.

(Sgd.) R. S. FORSTER.

Town Clerk.

Town Hall, Dyne Road, Kilburn, N.W.6. 2371

5th October, 1949.

NORFOLK EDUCATION COMMITTEE.

The Norfolk Education Committee invite Architects resident in Great Britain to submit designs in Competition for a County Modern (Secondary) School at Hunstanton, to accommodate 450 (mixed) pupils.

The assessor nominated by the President of the Royal Institute of British Architects is Mr. Denis Clarke Hall, F.R.I.B.A., 6, Masons Yard, Duke Street, St. James, London, S.W.1.

The last day for submitting designs is 28th February, 1950. The premiums will be £500, £250, £150.

Conditions of the competition may be obtained, on the payment of a deposit of £2, from the undersigned. The deposit is returnable under the conditions governing architectural competitions, as issued by the Royal Institute of British Architects.

W. O. BELL.

Chief Education Officer.

Norfolk Education Committee, 2388

Stracey Road, Norwich.

CAMBRIDGESHIRE COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT.

Applications are invited for the following appointments—

(a) PLANNING OFFICER. Grade A.P.T. VIII (salary £685-£760 per annum).

(b) PLANNING ASSISTANT. Grade A.P.T. V (salary £520-£570 per annum).

(c) PLANNING ASSISTANT. Grade A.P.T. IV (salary £480-£525 per annum).

Candidates for the Grade VIII appointment must be Corporate Members of the Town Planning Institute. The appointments are subject to the Provisions of the Local Government Superannuation Act, 1937, and to the Council's Condition of Service and a medical examination.

Applications, stating age, past and present appointments (with dates), qualifications, present salary, and the names of two referees, should be sent to the undersigned not later than the 31st October, 1949, endorsed "Planning Officer" or "Planning Assistant."

CHARLES PHYTHIAN.

Clerk of the County Council.

Shire Hall, Castle Hill, Cambridge. 2368

METROPOLITAN BOROUGH OF WANDSWORTH. ARCHITECTURAL ASSISTANTS.

Applications are invited for the under-mentioned vacancies in the Borough Architect's Department—

(a) ONE ESTABLISHED ARCHITECTURAL ASSISTANT, at a salary in accordance with Grade A.P.T. V (£550-£600 per annum, inclusive). Candidates should have had good professional training, experience of housing schemes, the layout of estates, and general architectural design. Preference will be given to Associates of the R.I.B.A.

(b) TWO ESTABLISHED ARCHITECTURAL ASSISTANTS, at a salary in accordance with Grade A.P.T. I (£420-£465 per annum, inclusive). Candidates should be studying for the R.I.B.A. examinations, and have had some experience in general architectural work.

(c) ONE UNESTABLISHED TRACING ASSISTANT (Male), at a salary in accordance with Miscellaneous Division II (£405-£450 per annum, inclusive).

Candidates should be experienced in colouring and tracing architectural drawings, and also be capable of setting up drawings from preliminary sketches.

Application forms may be obtained from the Borough Architect, and must be returned to the undersigned not later than 1st November, 1949.

R. H. JERMAN.

Town Clerk.

Municipal Buildings, Wandsworth, S.W.18. 2414

7th October, 1949.

HAMPSHIRE.

Applications are invited for the following appointments on the established staff of the County Architect's Department—

SENIOR ENGINEERING ASSISTANT, for drainage and sewage disposal work, on Grade VI of the National Salary Scales (£595×£20×£25—£660).

Candidates should be Chartered Civil Engineers or have equivalent qualifications, and should have had extensive experience of sewage schemes of all sizes gained through service with a Consulting Engineer or in the Main Drainage Department of a Local Authority.

TWO SENIOR ASSISTANT ARCHITECTS, on Grade VI of the National Salary Scales (£595×£20×£25—£660).

Candidates must be Registered Architects, preferably A.R.I.B.A., with experience in design and construction of public buildings, including schools.

ARCHITECTURAL ASSISTANT, on Grade III of the National Salary Scales (£450×£15—£495).

Candidates should be Students R.I.B.A., with suitable experience.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the National Scheme of Conditions of Service, and will be terminable by one calendar month's notice on either side. In approved cases, the County Council are prepared to assist newly appointed members of the staff to meet removal and other expenses.

Applications, on forms to be obtained from the County Architect, The Castle, Winchester, should be returned to him not later than Monday, the 31st October, 1949.

G. A. WHEATLEY.

Clerk of the County Council.

The Castle, Winchester. 2432

10th October, 1949.

SURREY COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of PRINCIPAL ASSISTANT ARCHITECT, at a commencing salary of £800 per annum, rising by annual increments of £25 to a maximum of £900 per annum.

Applicants must be Members of the Royal Institute of British Architects, and should have had experience in the control of staff, the organization of work, and an adequate experience in the design and construction of modern buildings.

The appointment will be subject to the provisions of the Local Government Act, 1937, and the successful applicant will be required to pass a medical examination.

Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-upon-Thames, not later than the 8th November, 1949.

Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

The Council will be unable to provide any housing accommodation, and the successful applicant will be expected to make his own arrangements in this direction.

DUDLEY AUKLAND.

Clerk of the Council.

County Hall, Kingston-upon-Thames. 2430

EAST SUFFOLK COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following posts in the County Architect's Department—

Grade A ASSISTANT ARCHITECTS.

A.P.T. Grade VII. Consolidated salaries £635-£710 per annum.

The commencing salary in this grade will be fixed according to the qualifications and experience.

Applicants must be Members of the R.I.B.A., quick and accurate draughtsmen, capable of carrying a job through in all its stages, including sketch plans, working drawings, supervision of work in progress, as well as the administration work in connection therewith. They should have a sound knowledge of design and building construction, and should be capable of writing specifications. Office experience after school training or articles is essential. The work to be dealt with is that normally carried out by a Local Authority.

The appointment will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation Act, 1937. The successful applicants will be required to pass a medical examination.

Applications, stating age, qualifications, and full details of previous experience, accompanied by copies of three recent testimonials, should be sent to E. J. Symcox, F.R.I.B.A., County Architect, County Hall, Ipswich, not later than 4th November, 1949.

Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

G. C. LIGHTFOOT.

Clerk of the Council.

County Hall, Ipswich. 2455

October, 1949.

BUCKS COUNTY COUNCIL.

The County Architect invites applications from qualified ASSISTANT ARCHITECTS who possess a keen and energetic enthusiasm for their profession. Candidates should preferably have been trained at a recognized School of Architecture. Salary Grade VI, £595-£660 p.a.

Further particulars and form of application may be obtained from the County Architect, County Offices, Aylesbury, to whom they must be delivered by 11th November, 1949. 2456

**BOROUGH OF BEXLEY.
APPOINTMENT OF ENGINEERING AND
ARCHITECTURAL STAFF.**

Applications are invited for the under-mentioned appointments in the Borough Engineer's Department:—

TECHNICAL ASSISTANT in the Building and Town Planning Section, within Grade A.P.T., IV. ARCHITECTURAL ASSISTANT (Housing and General), within Grade A.P.T., IV. ARCHITECTURAL ASSISTANT, within Grade A.P.T., II.

In each case London "weighting" will be paid in addition to the salary.

Forms of application, with conditions of appointment, may be obtained from the Borough Engineer and Surveyor, Council Offices, Bexleyheath, to whom completed applications must be returned by noon, Saturday, 5th November, 1949. Canvassing, directly or indirectly, will disqualify.

W. WOODWARD,
Town Clerk. 2454

**CITY OF BRADFORD.
CITY ENGINEER AND SURVEYOR'S
DEPARTMENT.**

APPOINTMENT OF TWO SENIOR TOWN PLANNING ASSISTANTS, GRADE A.P.T., VI.
(a) Town Planning and Architectural.
(b) Town Planning.

Applications are invited for the position of Two Senior Town Planning Assistants, in the City Engineer and Surveyor's Department, in accordance with Grade A.P.T., VI, of the National Scale of Salaries, i.e., £595-£660 per annum.

Candidates for (a) should be Associates of the R.I.B.A. and hold a University Degree or Diploma in architecture, or the Final Examination of a recognized School of Architecture, with experience in Town Planning and Civic Design; (b) should be Associate Members of the Town Planning Institute or hold a recognized diploma in Town Planning, Municipal or Civil Engineering, and should have had several years' experience in Town Planning.

These appointments are subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination.

Canvassing will disqualify and any applicant who is related to a member of, or a senior officer of, the Council must disclose the fact in his application.

Applications, stating age, present and previous appointments, with dates, qualifications and experience, accompanied by copies of three recent testimonials, should reach the undersigned not later than Wednesday, 9th November, 1949.

W. H. LEATHAM
Town Clerk. 2418

**BRECONSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.**
Applications are invited for the following permanent appointments (Male or Female) in the County Architect's Department:—

(a) ONE ASSISTANT ARCHITECT. Grade V (£520-£570 per annum).

(b) ONE ASSISTANT ARCHITECT. Grade IV (£480-£525 per annum).

(c) TWO ARCHITECTURAL ASSISTANTS. Grade III (£450-£495 per annum).

(d) Two ARCHITECTURAL ASSISTANTS. Grade I (£390-£435 per annum).

(e) ONE QUANTITY SURVEYOR. Grade VII (£635-£710 per annum).

Applicants for the appointment under (a) above must be Registered Architects.

The appointments will be subject to (i) the National Scheme of Conditions of Service, (ii) the provisions of the Local Government Superannuation Act, 1937, (iii) the passing of a satisfactory medical examination, and (iv) one month's written notice on either side.

Canvassing, directly or indirectly, will definitely disqualify the candidate for the appointment.

Applications must be made on a form to be obtained from the County Architect, Mr. H. C. W. Strickland, F.R.I.B.A., Watton Offices, Brecon, South Wales, and must be received by the undersigned not later than 6th November, 1949.

No housing accommodation can be provided by the Council for the successful applicants.

C. M. S. WELLS,
Clerk of the County Council. 2439

**BRITISH ELECTRICITY AUTHORITY.
SOUTH WALES DIVISION.**

Applications are invited for the appointment of WORKS INSPECTOR (temporary) in the Construction Department of Divisional Headquarters, at a salary of £450 per annum.

Applicants should have been engaged on large Civil Engineering Works, involving pile driving, bulk excavation, heavy foundation, and superstructure work. A knowledge of sinking of caissons and compressed air work would be considered an advantage.

Forms of application may be obtained from the Divisional Secretary at the address below, to whom completed applications should be returned within 10 days from the appearance of this advertisement in sealed envelopes endorsed "Works Inspector."

H. V. PUGH,
Divisional Controller.
Cardiff (Penzam Moors) Airport,
Cardiff.
19th October, 1949. 2498

**BOROUGH OF DROITWICH.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.**

Applications are invited for the above appointment in the Surveyor's Department of the Council.

The salary will be in accordance with Grade II of the A.P. and T. Division of the National Scale of Salaries (£420-£465 per annum).

Preference will be given to applicants who have passed the Intermediate Examination of the Royal Institute of British Architects or other recognized professional Institution.

The appointment will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation Act, 1937, and the passing of a satisfactory medical examination.

Applications, stating age, training, qualifications and experience, together with copies of two recent testimonials, are to be delivered to the undersigned not later than mid-day on Friday, 4th November, 1949.

S. G. FOSTER,
Town Clerk. 2426

Town Hall, Droitwich.
October, 1949.

**SURREY COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.**

Applications are invited for the following appointment:—

ARCHITECTURAL ASSISTANT, Grade I. Salary £390 to £435 per annum, plus London allowance of up to £30 per annum, according to age.

Applicants should be of good general training and give full details in their applications.

It is desirable that applications should be accompanied by a small sample of the applicant's work.

The appointments will be subject to the provisions of the Local Government Act, 1937, and the successful applicants will be required to pass a medical examination.

Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-upon-Thames, not later than the 6th November, 1949.

Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

DUDLEY AUKLAND,
Clerk of the Council.
County Hall, Kingston-upon-Thames. 2434

**CITY AND COUNTY OF THE CITY OF
EXETER.**

Applications are invited for the following appointments on the staff of the City Architect's Department:—

(a) ASSISTANT QUANTITY SURVEYORS, on the permanent staff. The salary will be within A.P.T., Grade V (£520 to £570 per annum).

Applicants must be experienced in the preparation of Bills of Quantities, interim valuations and final accounts.

(b) QUANTITY SURVEYORS' ASSISTANTS. Vacancies on the permanent and temporary staff. Salaries within A.P.T., Grades I, II, III or IV (i.e., £390 to £525 per annum), according to experience.

Applicants must be experienced in abstracting, working up Bills of Quantities, and site measurement.

All the above appointments will be subject to one month's notice on either side.

Permanent appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and successful applicants for these appointments will be required to pass a medical examination.

Canvassing will disqualify, and candidates must disclose whether, to their knowledge, they are related to any member of the Council or to the holder of any senior office under the Council.

Applications, stating age, qualifications, previous and present appointments and salaries, full details of experience, and the earliest possible date when available, together with copies of recent testimonials, should be sent to H. E. Rowe, F.R.I.B.A., A.M.I.Struct.E., City Architect, 2, Southernhay West, Exeter, not later than the 7th November, 1949. Applicants for posts under (b) above should also state salary required.

C. J. NEWMAN,
Town Clerk. 2440

Exeter.
October, 1949.

**WARWICKSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.**

Applications are invited for the appointment of CLERKS OF WORKS to supervise the erection of a number of Secondary and Primary Schools. The appointments will be for the duration of the construction of the various Schools and the salary will be £10 a week.

Applicants must have a thorough knowledge of all sections of the building-trade and be capable of setting out, measuring up, keeping records and making reports.

Application forms can be obtained from C. H. Elkins, F.R.I.B.A., A.R.I.C.S., County Architect, Shire Hall, Warwick, to whom they are returnable within fourteen days of the appearance of this advertisement.

L. EDGAR STEPHENS,
Clerk of the Council. 2507

Shire Hall.
Warwick.

**NATIONAL COAL BOARD—SCOTTISH
DIVISION.**

A vacancy exists at Headquarters in Edinburgh for an Engineer (Building), Grade II. Candidates must have considerable experience in the preparation of heating lay-outs and details, with preferably a knowledge of the Plenum System. They must hold a Professional qualification and have a good practical knowledge of the supervision and maintenance of works. Salary scale £450-£525-£700. The point of entry into the salary scale will depend on the qualifications and experience of the successful applicant, who will be required to pass a medical examination. Suitable applicants should forward their applications, giving details of age, qualifications, experience, present post and salary, to Establishments Officer, 1, Eglinton Crescent, Edinburgh, within 14 days.

2467

**GOVERNMENT OF NORTHERN IRELAND.
MINISTRY OF FINANCE.**

CHIEF ARCHITECT'S BRANCH.

Applications are invited for posts of ASSISTANT ARCHITECT, Grade B. Appointments will be non-pensionable, but, as far as can be foreseen, will last for several years. Those appointed will be eligible for consideration for appointment to established posts as vacancies arise. The works programme embraces design and execution of Factories, Housing and Public Buildings.

Successful candidates will be remunerated according to qualifications and experience, within the salary range £500-£750 per annum.

Qualifications: Candidates must be Associates of the Royal Institute of British Architects or possess equivalent qualifications, and must have had good general experience in an Architect's office, including the writing of Specifications.

Preference will be given to ex-Service candidates of the 1914-18 or 1939-45 war, provided that such candidates can or within a reasonable time will be able to fill the posts efficiently.

Applications, quoting reference S.B.143/49, and giving the date of birth and full details of training and qualification, should be sent immediately to the Director of Establishments, Ministry of Finance, Stormont, Belfast. 2386

**NATIONAL COAL BOARD—EAST MIDLANDS
DIVISION.**

Applications are invited for the following permanent and superannuated posts in the DIVISIONAL ARCHITECT'S DEPARTMENT, in Nottingham.

(a) SENIOR ARCHITECT. Salary £850 by £35 to £1,150 per annum.

Applicants should be Members of the Royal Institute of British Architects, with extensive administrative and supervisory experience, and capable of taking charge of a section of Architectural work.

(b) ARCHITECTS, GRADE I. Salary £700 by £25 to £875 per annum.

Applicants should be Members of the Royal Institute of British Architects and have had considerable experience in the preparation of Sketch Plans, Working Drawings and Specifications, and large works of an Industrial and Welfare nature.

(c) QUANTITY SURVEYOR, GRADE I. Salary £700 by £25 to £875 per annum.

Applicants should preferably be Members of the R.I.C.S. and be experienced in the preparation of Bills of Quantities for all trades, and for engineering work, detailed approximate estimates, settlement of final accounts, make valuations and measurements for interim certificates, prepare specifications, etc., and have had considerable experience in a Quantity Surveyor's Office.

(d) ARCHITECTS, GRADE II. Salary £450 by £25 to £700 per annum.

Applicants should be Members of the R.I.B.A. and have had considerable experience in the preparation of Sketch Plans, Working Drawings and Specifications.

(e) QUANTITY SURVEYOR, GRADE II. Salary £450 by £25 to £700 per annum.

Applicants should preferably be Members of the R.I.C.S. with experience in the preparation of Bills of Quantities, detailed approximate Estimates, and preparation of Specifications.

(f) ARCHITECTURAL ASSISTANTS, GRADE I. Salary £410 by £20 to £550 per annum.

Applicants should have passed or be working for Inter. R.I.B.A. examination, and have had at least 5 years' office experience, with considerable experience of Sketch Plans and Working Drawings.

(g) ARCHITECTURAL ASSISTANTS, GRADE II. Salary £300 by £20 to £440 per annum.

Applicants should have passed, or be working for, the Inter. Examination R.I.B.A., and be able to assist in the preparation of Sketch Plans and Working Drawings.

(h) CLERK OF WORKS. Provisional salary scale £400 per annum upwards, according to qualifications and experience.

(i) WORKS CLERICAL OFFICER. Salary £300 by £15 to £410 per annum.

Candidates should have general clerical experience, with knowledge of building contracts. The point of entry into the relevant salary scales will depend on the qualifications and experience of the successful applicants.

Applications, stating age, education, qualifications, experience, present appointment and salary, should be submitted within 14 days of publication to the Secretary, N.C.B., East Midlands Division, Sherwood Lodge, Arnold, Notts.

Applicants should state clearly the appointment for which application is made, both in the letter and on the envelope. 2423

BATTERSEA BOROUGH COUNCIL. **APPOINTMENT OF CHIEF ARCHITECTURAL ASSISTANT AND JUNIOR QUANTITY SURVEYING ASSISTANT.**

Applications are invited for the following permanent appointments, in the Borough Engineer and Surveyor's Department, at the salaries mentioned in accordance with the National Joint Council's Scheme—

(a) **CHIEF ARCHITECTURAL ASSISTANT.** Commencing salary at the maximum of A.P.T., Grade VIII, viz., £760 per annum, rising by two further annual increments of £25 to an ultimate maximum of £810 per annum, plus London weighting, at present £30 per annum.

(b) **ONE JUNIOR ASSISTANT QUANTITY SURVEYOR.** Grade A.P.T., I. Salary £390 to £435 per annum, plus London weighting. Candidates for appointment (a) must be Associate Members of the Royal Institute of British Architects, and have had extensive experience in architectural design and construction. In addition administrative experience with a local authority would be an advantage.

The appointments will be determinable by one month's notice on either side, and are subject to the provisions of the Local Government Superannuation Act, 1937. The successful candidates will be required to pass a medical examination. The conditions of service are those of the National Scheme for Local Government Officers.

Forms of application may be obtained from the Borough Engineer and Surveyor, Town Hall, Lavender Hill, S.W.11, and should be returned, together with copies of three recent testimonials, in a suitably endorsed envelope, to reach the undersigned not later than noon on Wednesday, 2nd November, 1949.

R. G. BERRY.

Town Clerk.

Town Hall, Battersea, S.W.11. 2475

MIDDLESEX COUNTY COUNCIL. **COUNTY PLANNING DEPARTMENT.**

SIX PLANNING ASSISTANTS (A.P.T., IV). £480, rising to £525, plus £20-£30 London weighting (according to age). Candidates should have own planning experience and should have passed the Intermediate Examination of the T.P.I., but other appropriate examinations or qualifications will be considered. Established, pensionable posts, subject to medical examination and prescribed conditions of service. Applications, giving full details, with three recent testimonials, to the undersigned by 25th November, 1949 (quoting G.18, A.J.). Canvassing disqualifies.

C. W. RADCLIFFE.

Clerk of the County Council. 2474
Middlesex Guildhall, S.W.1.

CITY OF BIRMINGHAM EDUCATION COMMITTEE.

COLLEGE OF ART AND CRAFTS. **BIRMINGHAM SCHOOL OF ARCHITECTURE.**

Principal: MEREDITH W. HAWES, A.R.C.A., N.R.D.

Director of School of Architecture: A. DOUGLAS JONES, Dip. Arch. (Liverpool), F.R.I.B.A.

Applications are invited for the post of full-time SENIOR ASSISTANT LECTURER IN ARCHITECTURE. Commencing salary will be in accordance with Burnham Technical Scale (1948) for Senior Assistants (£700, plus £25-£300 per annum), with addition (normally up to £75 per annum), for appropriate graduate or professional qualifications and training. A contemporary outlook and an enthusiasm for teaching are of first importance. The successful applicant will be required to take up duty as soon as possible.

Forms of application may be obtained from the Principal, College of Art and Crafts, Margaret Street, Birmingham 5, on receipt of a stamped addressed foolscap envelope, and must be returned not later than ten days after the appearance of this advertisement.

E. L. RUSSELL.

Chief Education Officer. 2473

SUNBURY-ON-THAMES URBAN DISTRICT COUNCIL.

ARCHITECTURAL ASSISTANT.

The Council invite applications for the above-mentioned permanent appointment in the Surveyor's Department at a salary in accordance with Grade III of the A.P. and T. Division of the National Scales, viz., £450-£515-£495 per annum, plus appropriate London "weighting."

Candidates must have good experience in the preparation of drawings, details and specifications for general architectural work, and be able to demonstrate originality in design. Qualifications are not a condition of appointment, but candidates will be required to produce evidence of ability and, other things being equal, preference will be given to suitably qualified applicants.

Housing accommodation, if required, will be made available to the successful candidate.

Applications should be forwarded to the Engineer and Surveyor of the Council at the address below, to reach him by first post on the 31st November, 1949. Testimonials need not be sent, but the names of two referees must be given.

Canvassing, either directly or indirectly, will operate as a disqualification; and candidates must disclose in the application whether to their knowledge they are related to any member or senior officer of the Council.

T. L. WATTS.

Clerk of the Council. 2462
Council Offices, Sunbury-on-Thames.
22nd October, 1949.

LONDON COUNTY COUNCIL. **PLANNING STAFF.**

Vacancies in the following grades (some permanent):—

PLANNING OFFICER, Grade I, £340 to £360 a year.

PLANNING OFFICER, Grade II, £270 to £280 a year.

PLANNING OFFICER, Grade III, £550 to £700 a year.

TECHNICAL ASSISTANT (a), £440 to £580 a year.

TECHNICAL ASSISTANT (b), 55s. to 157s. 6d. a week.

Candidates for Grade III positions and above should possess architectural, surveying or town planning qualifications, and will be engaged on either (a) Research; (b) Development Plan, and Survey; (c) Development applications, or (d) Reconstruction Areas and detailed planning.

Full particulars and forms of application obtainable from the Architect to the Council (AR/P/P). The County Hall, Westminster Bridge, S.E.1 (enclose stamped addressed foolscap envelope). Canvassing disqualifies. (193) 899

CITY OF BATH.

CITY ENGINEER'S DEPARTMENT. **ARCHITECTURAL SECTION.**

Applications are invited for the appointment of TWO GENERAL ARCHITECTURAL ASSISTANTS, on the permanent staff of the City Engineer, Salary A.P.T., III or IV (£450-£495 or £480-£525), according to qualifications and experience.

Preference will be given to candidates who are Associate Members of the Royal Institute of British Architects or hold equivalent qualifications, and who have had experience in the design and supervision of housing estates or domestic buildings.

Appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications and experience, together with names and addresses of three referees, should be sent to the City Engineer, Guildhall, Bath, not later than Saturday, 12th November, 1949.

JARED E. DIXON.

Town Clerk. 2494

COUNTY BOROUGH OF DERRY. **BOROUGH ARCHITECT'S DEPARTMENT.**

Applications are invited for the following appointments on the permanent staff, in accordance with the National Scale of Salaries:—
(a) **THREE SENIOR ASSISTANT ARCHITECTS, Grade VIII, Salary £685-£760.**

Applicants must be Associate R.I.B.A., with a good knowledge of work undertaken by a Local Authority, preferably with experience in School work.

(b) **THREE JUNIOR ARCHITECTS, Grade I/II, Salary £390-£465.**

Applicants should have passed the Preliminary Examination of the R.I.B.A. and have had experience in general Architectural work.

(c) **ONE ASSISTANT ARCHITECT (Grade III, IV and V), Salary £450-£570.**

Applicants should be of R.I.B.A. Intermediate Examination standard, and have had good Architectural experience.

The appointments will be subject to one month's notice in writing on either side, and to the terms of the National Joint Council's Scheme of Conditions of Service, and the provisions of the Local Government Superannuation Act, 1937, and the successful applicants will be required to pass a medical examination.

Forms of application may be obtained from Thos. W. East, F.R.I.B.A., Borough Architect, The Council House, Corporation Street, Derby, and should be returned when completed, together with a copy of one testimonial and the names of two persons to whom reference may be made, to arrive not later than Monday, 14th November, 1949.

Canvassing, directly or indirectly, will be a disqualification.

E. H. NICHOLS.

Town Clerk. 2493

COUNCIL OF THE COUNTY OF ABERDEEN. **COUNTY ARCHITECT'S DEPARTMENT.**

Applications are invited for appointment as ASSISTANT ARCHITECT, Salary scale £480, rising by annual increments to £610 per annum. Placing within the scale may be granted according to the successful candidate's qualifications and experience.

Candidates must be Registered Architects and should be Associates of the Royal Institute of British Architects.

The appointment is subject to the Local Government Superannuation (Scotland) Act, 1937, and the successful candidate will require to pass a medical examination.

Conditions of appointment and Forms of Application are obtainable from the undersigned, and should be returned completed not later than 4th November, 1949.

Canvassing of members of the Council, directly or indirectly, in connection with the appointment shall disqualify the candidate.

CHAS. HORNAL.

County Clerk.

County Buildings, 22, Union Terrace, Aberdeen. 19th October, 1949. 2500

ESSEX COUNTY COUNCIL. **COUNTY PLANNING DEPARTMENT.**

The Essex County Council invite applications for the appointment, on the established staff of the County Planning Department, of AREA PLANNING OFFICER in the North-West Essex Area Office at Braintree, at a salary not exceeding the maximum for Grade X, A.P.T.D. (£1,000 a year).

The salary will be fixed in accordance with the qualifications and experience of the applicant appointed, but will not exceed the maximum salary for the post as stated above.

Candidates must be Corporate Members of the Town Planning Institute and preferably should possess an additional recognised professional qualification. They should have an up-to-date knowledge of town and country planning practice and be experienced in the administration of an office and the handling of staff. They should also have had considerable experience with a local planning authority.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination to the satisfaction of the Council.

The Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, as from time to time amended and as adopted by the County Council, is at present applicable to persons appointed on the established staff.

Canvassing, directly or indirectly, will disqualify.

Application for this post must be made on a form to be obtained from the County Planning Adviser, Broomfield Place, Broomfield, Chelmsford, to whom it should be returned as soon as possible.

JOHN E. LIGHTBURN.

Clerk of the County Council. 2505

County Hall, Chelmsford. 20th October, 1949.

HUNTINGTON BOROUGH COUNCIL. **APPOINTMENT OF CLERK OF WORKS—HOUSING.**

Applications are invited for the appointment of a temporary full-time Clerk of Works, for the American Lane Housing Scheme. Salary to be offered is dependent on the qualifications and experience of the selected candidate, who will be required to commence his duties on or about 1st January, 1950, for a period of two years. Applicants must have a thorough knowledge of the building trade. Applications, giving full particulars of age, qualifications, and experience, together with copies of two recent testimonials, should be addressed to the Town Clerk, Ambury House, Huntingdon, so as to reach him not later than 9th November, 1949. 2495

COUNTY BOROUGH OF CROYDON. **BOROUGH ENGINEER'S DEPARTMENT.**

ARCHITECTURAL ASSISTANT.

Applications are invited for this appointment from suitably qualified candidates who have had architectural experience (particularly housing), with a local authority.

Salary Grade A.P.T., II, £420, plus £15-£465 per annum (plus London weighting). The appointment is pensionable, subject to medical examination.

The Council do not offer housing accommodation.

Forms of application may be obtained from the Borough Engineer, Town Hall, Croydon, and should be returned to him not later than 14 days after the publication of this advertisement.

Canvassing will disqualify.

E. TABERNER.

Town Clerk. 2490

COUNTY BOROUGH OF BURNLEY. **BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.**

Applications are invited for the appointment of CHIEF PLANNING ASSISTANT, at a salary in accordance with Grade VII of the National Scales (£635, rising to £710 per annum).

Candidates must have had considerable experience in all aspects of Statutory Planning, Interim Development Control, and Planning procedure in general. Candidates should be Associate Members of the Town Planning Institute, and in addition be qualified Civil Engineers or Architects. Administrative experience will be an advantage.

Conditions of service are those formulated by the National Joint Council, and the appointment is on the established staff, and subject to the provisions of the Local Government Superannuation Act, 1937, the successful applicant being required to pass a medical examination. The appointment is terminable by one month's notice on either side.

Canvassing, either directly or indirectly, will disqualify the candidate, and any relationship to a member or senior officer of the Council must be clearly stated in the application.

Forms of application may be obtained from the Borough Engineer and Surveyor, Town Hall, Burnley, to whom applications should be returned in the envelope provided not later than 9 a.m. on Saturday, the 12th November, 1949.

C. V. THORNEY.

Town Clerk. 2499
Town Hall, Burnley. October, 1949.

BOROUGH OF EDMONTON. ARCHITECT'S DEPARTMENT.

The Borough Council require:—
ARCHITECTURAL ASSISTANT (Grade A.P.T./VI, £595×20 (2) and £25 (1) to £660 per annum), plus London weighting.
Candidates should be Associates of the R.I.B.A. or equivalent, and have had experience in Housing, Flats, and General Building work.
Full particulars, forms of application and conditions of service from the undersigned, to whom completed applications must be returned not later than 11th November, 1949.

H. BACKHOUSE,
Town Clerk.

Town Hall, Edmonton, N.9.
21st October, 1949. 2492

CITY OF BIRMINGHAM EDUCATION COMMITTEE. APPOINTMENT OF STAFF TO ARCHITECT'S BRANCH.

Applications are invited for the following appointments in the Architect's Branch of the Birmingham Education Department (Architect to the Committee: Mr. Alex. Steele, A.R.I.B.A.).

(a) FOUR DISTRICT ARCHITECTS.

Salary A.P.T. IX (£750×£50—£900).

Each District Architect will be responsible for various matters affecting the provision of new buildings in each of four sectors of the City, together with work in connection with extensions, adaptations, improvements and repairs to existing buildings.

Applicants should be registered Architects, having good experience in the control of major contracts.

(b) QUANTITY SURVEYOR.

Salary A.P.T. VII (£635×£15—£710).

Applicants should have had good general experience and will be required to prepare bills of quantities for minor contracts in addition to the checking of accounts and the general supervision of staff dealing with applications for controlled materials.

(c) ARCHITECTURAL ASSISTANT.

Salary A.P.T. IV (£480×£15—£525).

Applicants should have good general experience in the preparation of working drawings for major contracts and should show evidence of intention to qualify for registration.

Application forms, which may be obtained from the undersigned on receipt of a stamped addressed envelope, must be returned not later than three weeks after the appearance of this advertisement.

E. L. RUSSELL,
Chief Education Officer.

Education Office, Margaret Street,
Birmingham, 3. 2491

COUNTY BOROUGH OF EAST HAM. BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the undermentioned appointments:—

ENGINEERING ASSISTANT (Grade A.P.T. IV). Salary £480 to £525 per annum.

ARCHITECTURAL ASSISTANT (Grade A.P.T. I). Salary £390 to £435 per annum.

QUANTITY SURVEYOR (Grade A.P.T. IV). Salary £480 to £525 per annum.

TEMPORARY ARCHITECTURAL ASSISTANT (Grade A.P.T. III). Salary £450-£495 per annum.

The appropriate London weighting is paid in addition to the above salaries, and salaries in excess of the minima of the grades may be paid according to the qualifications and experience of successful candidates.

The Council will be prepared to consider applications for a subsistence allowance in appropriate cases from persons appointed should they be unable to obtain suitable housing accommodation.

Full particulars of the duties, terms and conditions of appointment and form of application (which must be returned by Monday, the 7th November, 1949) may be obtained from the undersigned.

Canvassing in any form will disqualify.

H. A. EDWARDS,
Town Clerk.

Town Hall, East Ham, E.6. 2503

COUNTY BOROUGH OF SOUTHAMPTON. BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) **SENIOR ASSISTANT ARCHITECTS**, Grade VI (£595-£660 p.a.).

(b) **JUNIOR QUANTITY SURVEYING ASSISTANT**, General Division (£135-£385 p.a.).

Applications, on forms obtainable from I. Berger, Dip.Arch., A.R.I.B.A., Borough Architect, Civic Centre, Southampton, should be returned not later than 9th November, 1949. 2508

CITY OF OXFORD EDUCATION COMMITTEE. SCHOOLS OF TECHNOLOGY, ART & COMMERCE.

SCHOOL OF ARCHITECTURE & BUILDING.

Applications are invited for the post of **FULL-TIME INSTRUCTOR AND LECTURER** in Building Construction and Allied Subjects.

Applicants must be suitably qualified in Architecture, Building or Civil Engineering. Salary will be paid in accordance with the Burnham (Technical) Award.

Forms of application and further particulars may be obtained on receipt of a stamped addressed envelope from the Chief Education Officer, 77-79, George Street, Oxford, to whom completed forms must be returned as soon as possible and in any case not later than 14 days from the appearance of this advertisement. 2506

METROPOLITAN BOROUGH OF HAMPSTEAD.

Applications are invited for the appointment of an **ARCHITECTURAL ASSISTANT**, on the Temporary Staff of the Housing Architect's Section of the Borough Engineer and Surveyor's Department, at a salary in accordance with Grade V of A.P.T. Division, National Scales of Salaries, £520 to £570 per annum, plus £30 London weighting. Age limit: 45 years of age on the 1st January, 1949.

Applicants should be suitably qualified, preferably Members of the Royal Institute of British Architects, and should have experience in general Architectural work, including Municipal flat and house planning and design, adaptations and conversions, and be able to prepare working drawings and specifications.

Applications, stating age, examination qualifications, present and past appointments, with dates and salaries, detailed particulars of experience, and accompanied by copies of three recent testimonials, or names of three referees, must be delivered to me in a sealed envelope endorsed "Architectural Assistant," not later than 12 noon on 21st November, 1949.

Applicants must disclose in writing whether they are, to their knowledge, related to any member or senior officer of the Council. The Council are unable to provide housing accommodation.

Canvassing will disqualify.

P. H. HARROLD,
Town Clerk.

October, 1949. 2496

HERTFORDSHIRE COUNTY COUNCIL. COUNTY PLANNING DEPARTMENT.

Applications are invited for the following appointments on the County Planning Staff:—

(a) **PLANNING ASSISTANT** (Development Control Section).

(b) **PLANNING ASSISTANT** (Survey and Development Plan Section).

Both appointments are on Grade VI (salary £595, rising to £660 per annum) upon the permanent staff and subject to the provisions of the Local Government Act, 1937.

Applicants must be Associate Members of the Town Planning Institute, and the following other qualifications and experience will be an advantage.

For appointment (a) experience in dealing with development applications; an additional qualification in Surveying or Municipal Engineering.

For appointment (b) experience in the preparation of a County Survey and Development Plan; skill in draughtsmanship; an additional qualification in Architecture, Municipal Engineering, Surveying or Landscape Design.

Forms of application from the County Planning Officer, County Hall, Hertford. Closing date: 21st November, 1949. 2497

BOROUGH OF STRATFORD-UPON-AVON. BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the appointment of **ASSISTANT ARCHITECT**, A.P.T. Division, Grade III (£450-£495). Conditions of the appointment and forms of application may be obtained from the undersigned, to whom completed application forms should be returned not later than 14th November, 1949.

P. C. SMART, A.M.I.C.E.,
Borough Engineer.

Municipal Offices, Stratford-upon-Avon. 2441

Tenders

PEMBROKESHIRE COUNTY COUNCIL. PUNCHSTON (NEW) COUNTY PRIMARY SCHOOL.

Building Contractors, desirous of **TENDERING** for the **ERECTION** of the above **SCHOOL** (3 Class) are requested to submit their application

to Mr. Walter Barrett, M.B.E., A.R.I.B.A., County Architect, County Offices, Haverfordwest, Pembrokeshire, by the 29th October, 1949.

General Conditions of Contract and Bills of Quantities will be supplied on receipt of £5 5s. deposit, returnable upon receipt of a *bona fide* Tender or the return of all documents. Drawings, etc., can be inspected at the office of the County Architect during the usual working hours.

No Tender will be considered unless submitted in the endorsed envelope provided for the purpose, and the Council does not bind itself to accept the lowest or any Tender received.

Contractors will be required to provide proof that they are in a position to provide the necessary labour to carry out the works.

Last day for the receipt of Tenders is 12th November, 1949.

D. T. JONES,
Clerk to the Education Committee.

County Offices, Haverfordwest. 2435
11th October, 1949.

Competitions

6 lines or under, 10s.; each additional line, 1s. 6d.

NORFOLK EDUCATION COMMITTEE.

The Norfolk Education Committee invite Architects, resident in Great Britain to submit designs in Competition for a County Modern (Secondary) School at Hunstanton, to accommodate 450 (mixed) pupils.

The assessor nominated by the President of the Royal Institute of British Architects is Mr. Denis Clarke Hall, F.R.I.B.A., 6, Masons Yard, Duke Street, St. James, London, S.W.1.

The last day for submitting designs is 28th February, 1950. The premiums will be £500, £250, £150.

Conditions of the competition may be obtained.

on the payment of a deposit of £2. from the undersigned. The deposit is returnable under the conditions governing architectural competitions, as issued by the Royal Institute of British Architects.

W. O. BELL,
Chief Education Officer.

Norfolk Education Committee,
Stracey Road, Norwich. 2509

Architectural Appointments Vacant

4 lines or under, 10s.; each additional line, 1s. 6d.

ARCHITECTURAL ASSISTANTS required immediately for interesting and varied work on Schools, Hospitals, University Buildings, Housing, etc.; salary dependent on experience and qualifications. Apply personally by telephone or in writing. Pite Son & Fairweather, Chartered Architects, 6, Queen Anne's Gate, Westminster, S.W.1. Whitehall 5576. 1969

ARCHITECTURAL ASSISTANT and also **ARCHITECTURAL DRAUGHTSMAN** required in established practice, mainly business premises over whole country; pleasant conditions; permanent and good prospects. Apply with all particulars to North & Partners, Queen Street Chambers, Maidenhead. 2193

ASSISTANT ARCHITECT required for work of great variety; applicants should be A.R.I.B.A., preferably school trained, with office experience, and able to assume responsibility for all stages of work and large contracts. Write, stating age, experience, and salary required, to T. P. Bennett & Son, 43, Bloomsbury Square, W.C.1. Telephone Chancery 6691. 2274

TWO qualified **ARCHITECTURAL ASSISTANTS** required, with experience of design and working drawings, in private office, London West Central area. Apply, giving particulars of experience and salary required, to Box 2275.

SANITARY ENGINEER-ASSISTANT required for Architect's office, London West Central area; must be neat draughtsman, with general knowledge of sanitation and experience of modern drainage, design, services, etc.; give details of experience, age, salary required, and date available, to Box 2290.

ARCHITECTURAL ASSISTANTS required for general architectural practice. Reply, stating experience and salary required, to Thomas Worthington & Sons, 178, Oxford Road, Manchester, 13. 2299

EXPERIENCED young **ASSOCIATE** required in London office; keen on a career in private practice, and capable of executing work from initial instructions to final account; complete freedom of action in organising own routine. For particulars apply Box 2370.

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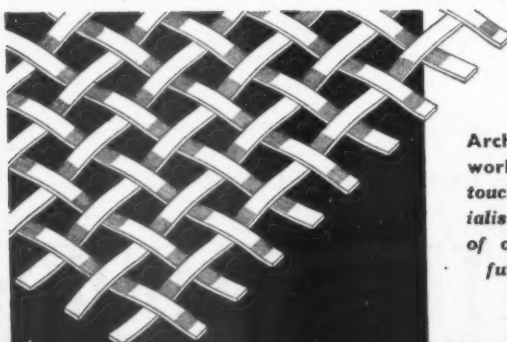
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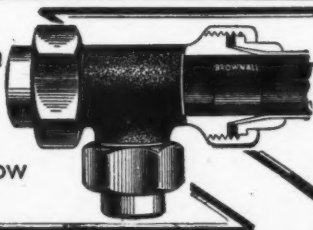
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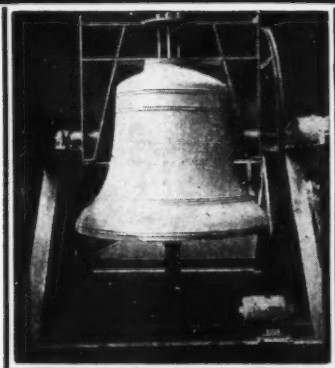
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